

I Patterns

Answers

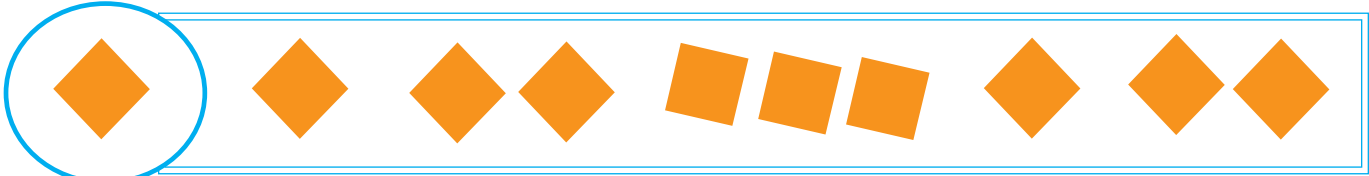
Practice Time

1.  

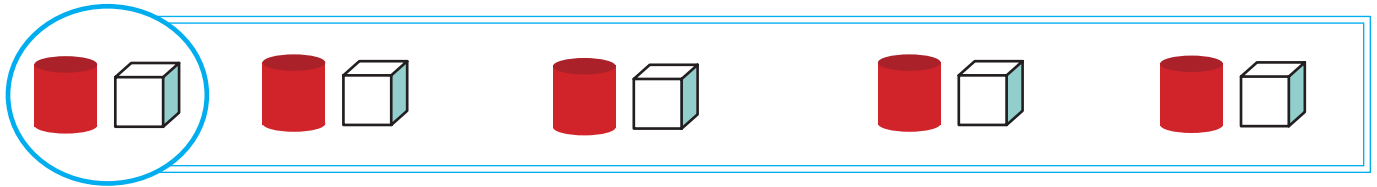
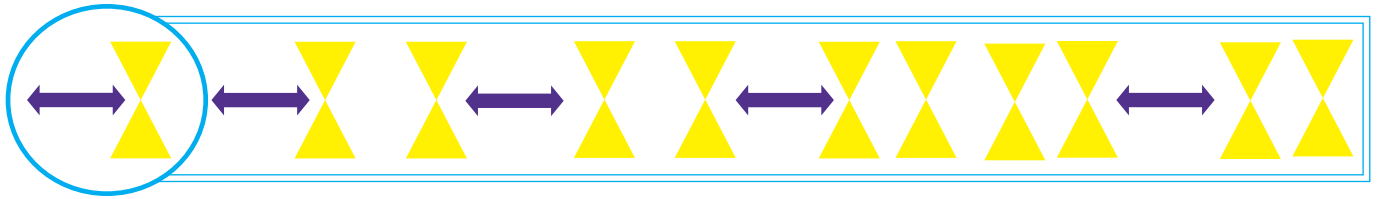
 

2. 





Practice Time

- 8, 13, 21, 34
 - 2000, 20000, 200000
 - 20, 24, 28, 32
 - 27, 9, 3, 1
 - 16, 12, 8, 4
 - 64, 128, 256, 512
- 'subtraction by 5'
 - 'adding 9'
 - 'multiply by 4'
 - 'adding 5'
 - 'adding 2'

3.

															1	=	1														
															1	+	2	=	3												
															1	+	2	+	3	=	6										
															1	+	2	+	3	+	4	=	10								
															1	+	2	+	3	+	4	+	5	=	15						
															1	+	2	+	3	+	4	+	5	+	6	=	21				
															1	+	2	+	3	+	4	+	5	+	6	+	7	=	28		
															1	+	2	+	3	+	4	+	5	+	6	+	7	+	8	=	36





4.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

5.

$$3 \times 1 = 3$$

$$3 \times 10 = 30$$

$$3 \times 100 = 300$$

$$3 \times 1000 = 3000$$

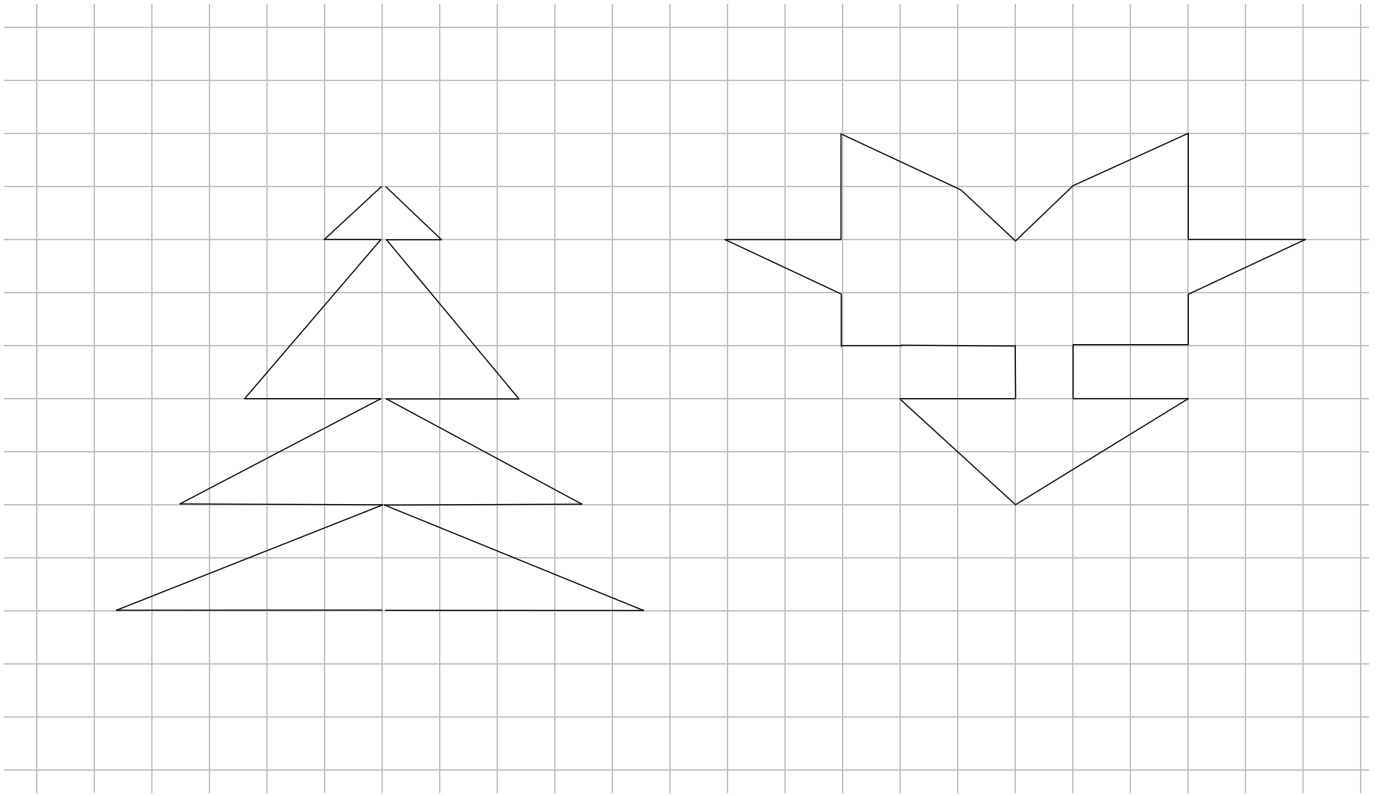
$$3 \times 10000 = 30000$$

$$3 \times 100000 = 300000$$

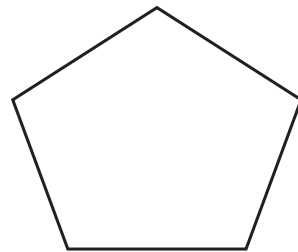
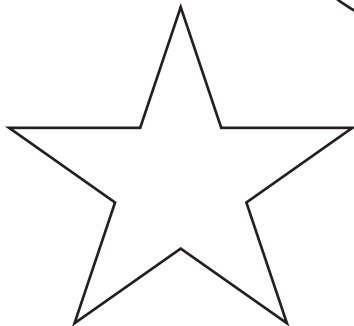
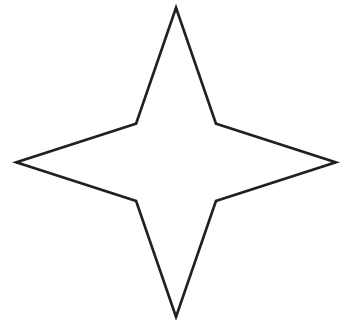
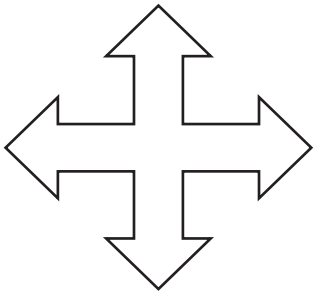
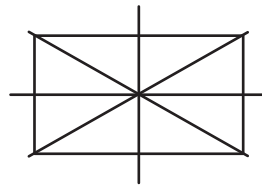
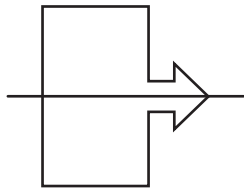




1.



2.





Scan Your Brain

1.

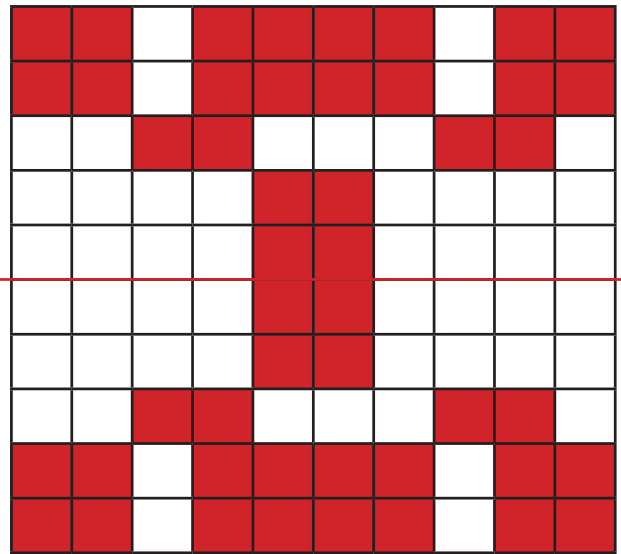
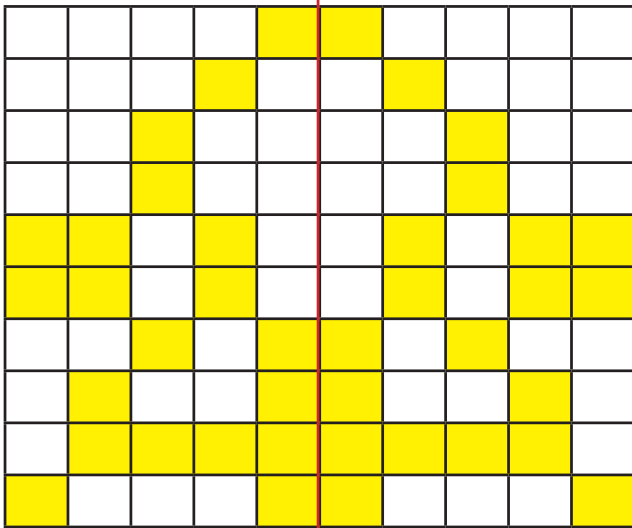
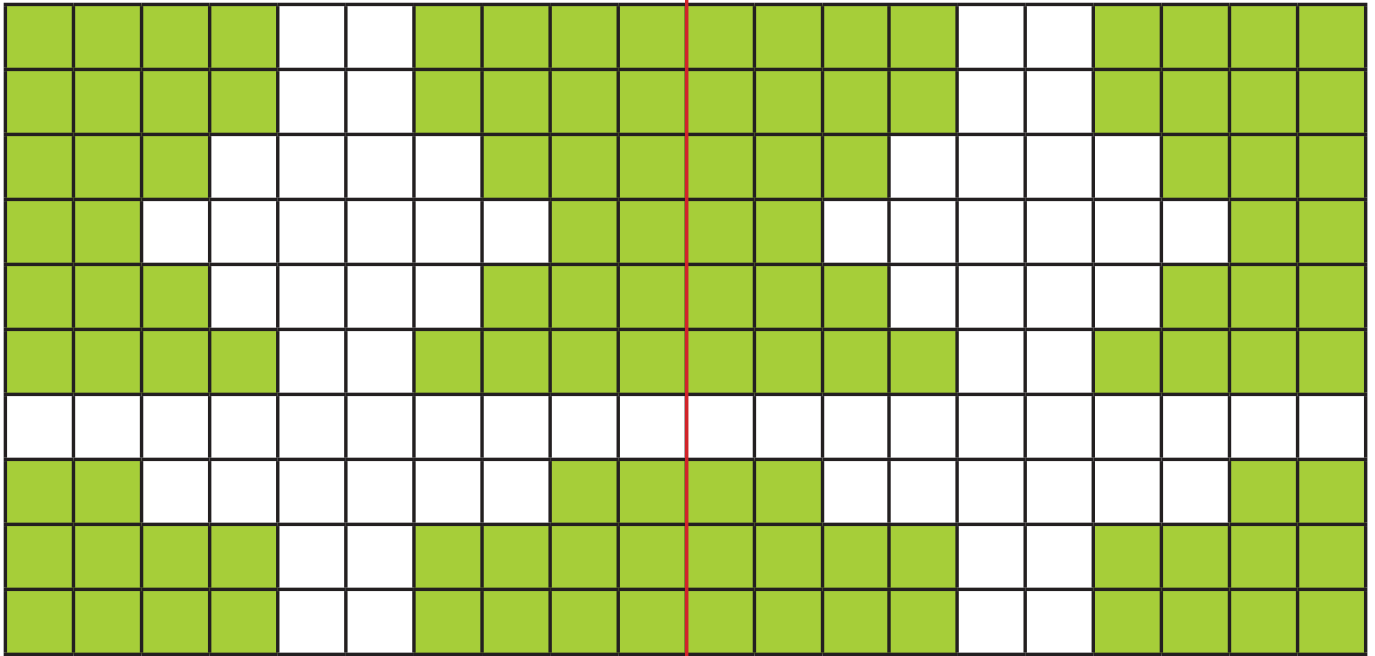
50 36 46 42 44 48 38 40	36 38 40 42 44 46 48 50
12 24 30 15 18 27 9 21	9 12 15 18 21 24 27 30
51 49 61 57 59 55 47 53	47 49 51 53 55 57 59 61
56 91 98 63 84 70 105 77	56 63 70 77 84 91 98 105
198 121 165 176 154 143 187 132	121 132 143 154 165 176 187 198
200 125 75 25 100 50 150 175	25 50 75 100 125 150 175 200
120 200 80 160 280 40 240 320	40 80 120 160 200 240 280 320

- 2.
- 1, 4, 7, 10, 13, 16, 19, 22
 - 2, 10, 18, 26, 34, 42, 50, 58, 66,
 - 117, 111, 105, 99, 93, 87, 81, 75,
 - 54, 50, 46, 42, 38, 34, 30, 26
 - 6, 60, 600, 6000, 60000, 600000, 6000000
 - 24, 32, 40, 48, 56, 64, 72, 80
 - 576, 288, 144, 72, 36, 18, 9

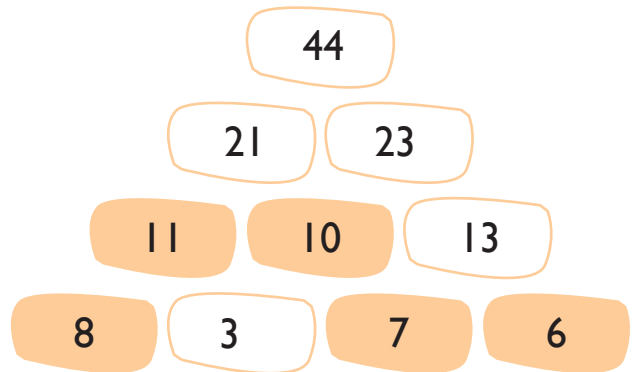
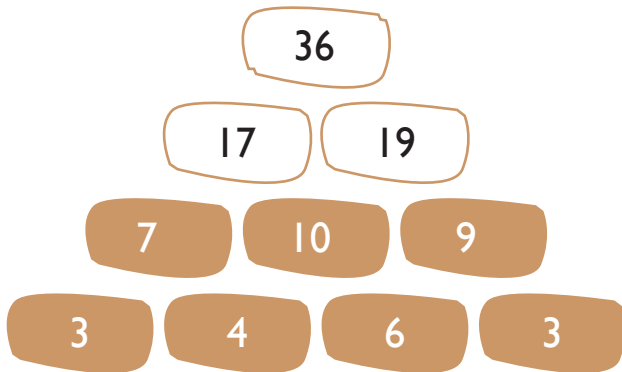




3.



Hots Questions





2

5 and 6-Digits Numbers

Answers

Practice Time

I.

Thirty-two thousand eight hundred seventy-one
32871

Forty-nine thousand six
49006

One thousand five hundred
10500

Thirty-four thousand Two hundred ninety-six
34296

Fifty-seven thousand thirty-one
57031

Two thousand one hundred nine
02109

Twenty thousand nine hundred six
20906

Thirty thousand three
30003

Twenty thousand three hundred fifty
20350





2.

Numbers	Hindu Arabic System		International System	
	Number names		Number names	
756239	7,56,239	Seven lakh fifty six thousand two hundred thirty nine	756,239	Seven hundred fifty six thousand & two hundred thirty Nine.
105823	1,05,823	One lakh five thousand Eight hundred twenty three	105823	One hundred five thousand & Eight hundred
397612	3,97,612	Three lakh Ninety seven thousand six hundred twelve	397,612	Three hundred ninety seven and six hundred twelve
440077	4,40,077	Four lakh forty thousand seventy-seven	440,077	Four hundred forty thousand and seventy seven
200001	2,00,001	Two lakh-one	200,001	Two hundred thousand and one

3.

Numbers	Lakhs/H. Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
20156		2	0	1	5	6
33000		3	3	0	0	0
10101		1	0	1	0	1
390009	3	9	0	0	0	9





78110		7	8	1	1	0
2436			2	4	3	6
4005			4	0	0	5
810001	8	1	0	0	0	1
63820		6	3	8	2	0
550005	5	5	0	0	0	5
42391		4	2	3	9	1
991100	9	9	1	1	0	0

Practice Time

1.

78(2)641

Place value = $2 \times 1000 = 2000$

Face value = 2

(9)1843

Place value = $9 \times 1000 = 9000$

Face value = 9

3(0)47

Place value = $0 \times 100 = 0$

Face value = 0

(1)0110

Place value = $1 \times 10000 = 10000$

Face value = 1

100(1)

Place value = $1 \times 1 = 1$

Face value = 1

83(9)20

Place value = $9 \times 100 = 900$

Face value = 9

4(4)106

Place value = $4 \times 1000 = 4000$

Face value = 4

(7)39246

Place value = $7 \times 100000 = 700000$

Face value = 7



2(9)1035

Place value = 9 × 10000 = 90000

Face value = 9

1(3)019

Place value = 3 × 1000 = 3000

Face value = 3

3(0)9282

Place value = 0 × 10000 = 0

Face value = 0

24(3)027

Place value = 3 × 1000 = 3000

Face value = 3

2.

52801	The place value of 5 is fifty thousand (50000)
606050	The place value of 5 is fifty (50)
35372	The place value of 5 is five thousand (5000)
1539	The place value of 5 is five hundred (500)
356103	The place value of 5 is fifty thousand (50000)
96725	The place value of 5 is five (5)
26514	The place value of 5 is five hundred (500)
22562	The place value of 5 is five hundred (500)
152643	The place value of 5 is fifty thousand (50000)
387534	The place value of 5 is five hundred (500)



597431	The place value of 5 is five lakh (500000)
546474	The place value of 5 is five lakh (500000)

3

387292	$300000 + 80000 + 7000 + 200 + 90 + 2$
98030	$90000 + 8000 + 0 + 30 + 0$
400065	$400000 + 0 + 60 + 5$
109102	$100000 + 0 + 9000 + 100 + 0 + 2$
921097	$900000 + 20000 + 1000 + 0 + 90 + 7$
29394	$20000 + 9000 + 300 + 90 + 4$
90080	$90000 + 0 + 80 + 0$
50050	$50000 + 0 + 50 + 0$

4.

$30000 + 6000 + 400 + 20 + 8$	36428
$10000 + 100 + 10 + 1$	10111
$4000 + 50 + 2$	4052
$600000 + 300 + 90 + 2$	600392
$500000 + 5000 + 500 + 50 + 5$	505555
$900000 + 80000 + 7000 + 7$	987007



5.

Predecessor	Number	Successor
20998	20999	21000
499998	499999	500000
99999	100000	100001
32763	32764	32765
40998	40999	41000
88888	888889	888890
470020	470021	470022
375999	376000	376001
909089	909090	909091
99999	100000	100001

6.

Digits	Smallest Number	Greatest Number
3, 5, 2, 0, 7	20357	75320
8, 0, 4, 6, 1	10468	86410
4, 7, 5, 8, 2	24578	87542
1, 9, 3, 6, 5, 6	135669	966531
2, 8, 4, 1, 3, 9	123489	984321

7.

39875 <u>></u> 29817	10643 <u>></u> 10396	10091 <u><</u> 100091
300025 <u><</u> 300056	48723 <u><</u> 397452	45632 <u><</u> 456320





$62034 > 60234$

$940493 > 934561$

$360006 < 360060$

$100009 = 100009$

$721841 > 87214$

$990099 > 900900$

8. a) 327165, 367145, 371546, 532760, 552361, 573261
 b) 200003, 203023, 223002, 230032, 230230, 233200
 c) 770978, 787799, 798709, 800977, 809787, 889977,
9. a) 689712, 673452, 663429, 656340, 606572, 61893
 b) 398201, 396745, 395489, 39953, 38594, 33859
 c) 665346, 653436, 573825, 534635, 454563, 445566

Scan Your Brain

1.

	Hindu–Arabic Numbers	International Numbers
700256	7,00,256	700,256
61390	61,390	61,390
258332	2,58,332	258,332
100001	1,00,001	100,001
58234	58,234	58,234
474563	4,74,563	474,563

2. a) 33,456

Thirty three thousand four hundred fifty six



b) 25957

Twenty five thousand nine hundred fifty seven






c) 1,89463

One lakh eighty nine thousand four hundred sixty three

d) 460020

Four lakh sixty thousand and twenty

Hots Questions

	Hindu Arabic	International System
	10,101	10,101
	1,10,110	110,110
	1,11,010	111,010
	310	310
	11,010	11,010
	1,10,010	110,010
	1,01,200	101,200
	10,110	10,110



3 Operations on Large Numbers

Answers

Practice Time

1. a) 678994 b) 654758 c) 1626039 d) 535261
e) 1014650 f) 717015 g) 1171195 h) 1408723
i) 594927 j) 256408 k) 1209270 l) 1042222
m) 1151442 n) 502904 o) 1428517 p) 752077
q) 1419673 r) 795884
2. a) 726612 b) 110136 c) 521130 d) 322066

3.

$$\begin{array}{r} 3,45,603 \\ +4,00,321 \\ \hline 7,45,924 \end{array}$$

$$\begin{array}{r} 100000 \\ 99999 \\ +9999 \\ \hline 209998 \end{array}$$

$$\begin{array}{r} 208254 \\ 374512 \\ +196382 \\ \hline ₹ 779148 \end{array}$$

$$\begin{array}{r} 64395 \\ -49863 \\ \hline 14532 \end{array}$$

$$\begin{array}{r} 209561 \\ -38725 \\ \hline 170836 \end{array}$$

$$\begin{array}{r} 509682 \\ -253409 \\ \hline 256273 \end{array}$$

4.

Minuend	Subtrahend	Difference
38654	29731	8923
492105	472243	19862
	482301	3579
982310	422409	559901
	63920	78651
664829	73959	590870

5. a) $29643 + 10936 - 20954$
 $= 40579 - 20954$
 $= 19625$

b) $109874 - 209543 + 229900$
 $= 229900 - 99669$
 $= 130,231$

c) $93452 - 105643 + 739582$
 $= 739582 - 12191$
 $= 727,391$

d) $539 - 24531 + 30250$
 $= 30250 - 23992$
 $= 6258$

Practice Time

I.

$$\begin{array}{r} \text{T O} \\ 47 \\ \times 23 \\ \hline \end{array}$$

$$\begin{array}{r} 141 \\ 94 \\ \hline 1081 \end{array}$$

$$\begin{array}{r} \text{H T O} \\ 989 \\ \times 25 \\ \hline \end{array}$$

$$\begin{array}{r} 4945 \\ 1978 \\ \hline 24725 \end{array}$$

$$\begin{array}{r} \text{H T O} \\ 837 \\ \times 28 \\ \hline \end{array}$$

$$\begin{array}{r} 6696 \\ 1674 \\ \hline 23436 \end{array}$$





$$\begin{array}{r} \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\ 2 \quad 1 \quad 3 \quad 4 \\ \times \qquad \qquad 5 \end{array}$$

1 0 6 7 0

$$\begin{array}{r} \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\ 4 \quad 4 \quad 5 \quad 0 \\ \times \qquad \qquad 8 \end{array}$$

3 5 6 0 0

$$\begin{array}{r} \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\ 3 \quad 2 \quad 4 \quad 8 \\ \times \qquad \qquad 9 \end{array}$$

2 9 2 3 2

$$\begin{array}{r} \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\ 2 \quad 7 \quad 8 \quad 8 \\ \times \qquad \qquad 9 \end{array}$$

2 5 0 9 2

$$\begin{array}{r} \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\ 7 \quad 2 \quad 3 \quad 1 \\ \times \qquad \qquad 8 \end{array}$$

5 7 8 4 8

$$\begin{array}{r} \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\ 9 \quad 0 \quad 2 \quad 9 \\ \times \qquad \qquad 8 \end{array}$$

7 2 2 3 2

$$\begin{array}{r} \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\ 5 \quad 3 \quad 5 \quad 7 \\ \times \qquad \qquad 6 \end{array}$$

3 2 1 4 2

$$\begin{array}{r} \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\ 4 \quad 4 \quad 6 \quad 5 \\ \times \qquad \qquad 4 \end{array}$$

1 7 8 6 0

$$\begin{array}{r} \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\ 3 \quad 9 \quad 0 \quad 5 \\ \times \qquad \qquad 8 \end{array}$$

3 1 2 4 0



Th	H	T	O
3	4	2	0
x			5

1	7	1	0	0

Th	H	T	O
2	4	5	2
x			7

1	7	1	6	4

Th	H	T	O
8	5	2	6
x			4

3	4	1	0	4

Th	H	T	O
3	4	1	2
x		1	9

3	0	7	0	8
3	4	1	2	
6	4	8	2	8

Th	H	T	O
8	0	3	4
x		1	7

5	6	2	3	8
8	0	3	4	
13	6	5	7	8

Th	H	T	O
6	9	1	7
x		1	5

3	4	5	8	5
6	9	1	7	
10	3	7	5	5

Th	H	T	O
7	2	7	9
x		2	3

2	1	8	3	7
14	5	5	8	
16	7	5	4	7

Th	H	T	O
8	1	8	0
x		3	4

3	2	7	2	0
24	5	4	0	
27	8	1	2	0

Th	H	T	O
2	6	6	3
x		4	5

1	3	3	1	5
10	6	5	2	
10	9	8	3	5

Th	H	T	O
4	3	5	6
x		4	6

2	6	1	3	6
1	7	4	2	4
20	0	3	7	6

Th	H	T	O
7	1	2	5
x		6	4

2	8	5	0	0
42	7	5	0	
45	6	0	0	0

Th	H	T	O
8	4	5	6
x		2	8

6	7	6	4	8
16	9	1	2	
23	6	7	6	8





2.

$$45 \times 200$$

$$\begin{aligned} 45 \times 200 &= 45 \times (2 \times 100) \\ &= (45 \times 2) \times 100 \\ &= 90 \times 100 \\ &= 9000 \end{aligned}$$

$$19 \times 300$$

$$\begin{aligned} 19 \times 300 &= 19 \times (3 \times 100) \\ &= (19 \times 3) \times 100 \\ &= 57 \times 100 \\ &= 5700 \end{aligned}$$

$$68 \times 300$$

$$\begin{aligned} 68 \times 300 &= 68 \times (3 \times 100) \\ &= (68 \times 3) \times 100 \\ &= 204 \times 100 \\ &= 20400 \end{aligned}$$

$$212 \times 300$$

$$\begin{aligned} 212 \times 300 &= 212 \times (3 \times 100) \\ &= (212 \times 3) \times 100 \\ &= 636 \times 100 \\ &= 63600 \end{aligned}$$

$$555 \times 600$$

$$\begin{aligned} 555 \times 600 &= 555 \times (6 \times 100) \\ &= (555 \times 6) \times 100 \\ &= 3330 \times 100 \\ &= 333000 \end{aligned}$$

$$25 \times 400$$

$$\begin{aligned} 25 \times 400 &= 25 \times (4 \times 100) \\ &= (25 \times 4) \times 100 \\ &= 100 \times 100 \\ &= 10000 \end{aligned}$$

$$98 \times 700$$

$$\begin{aligned} 98 \times 700 &= 98 \times (7 \times 100) \\ &= (98 \times 7) \times 100 \\ &= 686 \times 100 \\ &= 68600 \end{aligned}$$

$$452 \times 500$$

$$\begin{aligned} 452 \times 500 &= 452 \times (5 \times 100) \\ &= (452 \times 5) \times 100 \\ &= 2260 \times 100 \\ &= 226000 \end{aligned}$$




$$\underline{427} \times \underline{500}$$

$$\underline{427} \times \underline{500} = \underline{427} \times (\underline{5} \times \underline{100})$$

$$= (\underline{427} \times \underline{5}) \times \underline{100}$$

$$= \underline{2135} \times \underline{100}$$

$$= \underline{213500}$$

$$\underline{94} \times \underline{100}$$

$$\underline{94} \times \underline{100} = \underline{94} \times (\underline{1} \times \underline{100})$$

$$= (\underline{94} \times \underline{1}) \times \underline{100}$$

$$= \underline{94} \times \underline{100}$$

$$= \underline{9400}$$

$$\underline{26} \times \underline{900}$$

$$\underline{26} \times \underline{900} = \underline{26} \times (\underline{9} \times \underline{100})$$

$$= (\underline{26} \times \underline{9}) \times \underline{100}$$

$$= \underline{234} \times \underline{100}$$

$$= \underline{23400}$$

$$\underline{689} \times \underline{100}$$

$$\underline{689} \times \underline{100} = \underline{689} \times (\underline{1} \times \underline{100})$$

$$= (\underline{689} \times \underline{1}) \times \underline{100}$$

$$= \underline{689} \times \underline{100}$$

$$= \underline{68900}$$

$$\underline{91} \times \underline{900}$$

$$\underline{91} \times \underline{900} = \underline{91} \times (\underline{9} \times \underline{100})$$

$$= (\underline{91} \times \underline{9}) \times \underline{100}$$

$$= \underline{819} \times \underline{100}$$

$$= \underline{81900}$$

$$\underline{89} \times \underline{200}$$

$$\underline{89} \times \underline{200} = \underline{89} \times (\underline{2} \times \underline{100})$$

$$= (\underline{89} \times \underline{2}) \times \underline{100}$$

$$= \underline{178} \times \underline{100}$$

$$= \underline{17800}$$

$$\underline{34} \times \underline{800}$$

$$\underline{34} \times \underline{800} = \underline{34} \times (\underline{8} \times \underline{100})$$

$$= (\underline{34} \times \underline{8}) \times \underline{100}$$

$$= \underline{272} \times \underline{100}$$

$$= \underline{27200}$$

$$\underline{711} \times \underline{200}$$

$$\underline{711} \times \underline{200} = \underline{711} \times (\underline{2} \times \underline{100})$$

$$= (\underline{711} \times \underline{2}) \times \underline{100}$$

$$= \underline{1422} \times \underline{100}$$

$$= \underline{142200}$$

$$108 \times 800$$

$$\begin{aligned} 45 \times 200 &= 45 \times (2 \times 100) \\ &= (45 \times 2) \times 100 \\ &= 90 \times 100 \\ &= 9000 \end{aligned}$$

$$48 \times 600$$

$$\begin{aligned} 48 \times 600 &= 48 \times (6 \times 100) \\ &= (48 \times 6) \times 100 \\ &= 288 \times 100 \\ &= 28800 \end{aligned}$$

$$755 \times 300$$

$$\begin{aligned} 755 \times 300 &= 755 \times (3 \times 100) \\ &= (755 \times 3) \times 100 \\ &= 2265 \times 100 \\ &= 226500 \end{aligned}$$

$$396 \times 400$$

$$\begin{aligned} 396 \times 400 &= 396 \times (4 \times 100) \\ &= (396 \times 4) \times 100 \\ &= 1584 \times 100 \\ &= 158400 \end{aligned}$$

Practice Time

I.

$$\begin{array}{r} 8 \\ 7 \overline{) 58} \\ \underline{-56} \\ 2 \end{array}$$

$$\begin{array}{r} 2 \\ 15 \overline{) 43} \\ \underline{-30} \\ 13 \end{array}$$

$$\begin{array}{r} 3 \\ 19 \overline{) 58} \\ \underline{-57} \\ 1 \end{array}$$

$$\begin{array}{r} 12 \\ 8 \overline{) 96} \\ \underline{-8} \\ 16 \\ \underline{16} \\ \hline X \end{array}$$

$$\begin{array}{r} 120 \\ 6 \overline{) 723} \\ \underline{-6} \\ 12 \\ \underline{-12} \\ 3 \\ \underline{-0} \\ 3 \end{array}$$

$$\begin{array}{r} 15 \\ 7 \overline{) 109} \\ \underline{-7} \\ 39 \\ \underline{-35} \\ 4 \end{array}$$

$$\begin{array}{r} 4 \overline{) 352} \\ - 32 \\ \hline 32 \\ - 32 \\ \hline X \end{array}$$

$$\begin{array}{r} 2 \overline{) 805} \\ - 8 \\ \hline 05 \\ - 4 \\ \hline 1 \end{array}$$

$$\begin{array}{r} 26 \\ 32 \overline{) 857} \\ - 64 \\ \hline 217 \\ - 192 \\ \hline 25 \end{array}$$

$$\begin{array}{r} 3 \overline{) 319} \\ - 3 \\ \hline 1 \\ - 0 \\ \hline 19 \\ - 18 \\ \hline 1 \end{array}$$

$$\begin{array}{r} 51 \\ 8 \overline{) 412} \\ - 40 \\ \hline 12 \\ - 8 \\ \hline 4 \end{array}$$

$$\begin{array}{r} 25 \\ 23 \overline{) 586} \\ - 46 \\ \hline 126 \\ - 115 \\ \hline 11 \end{array}$$

$$\begin{array}{r} 5 \overline{) 653} \\ - 5 \\ \hline 15 \\ - 15 \\ \hline 3 \\ - 0 \\ \hline 3 \end{array}$$

$$\begin{array}{r} 79 \\ 9 \overline{) 712} \\ - 63 \\ \hline 82 \\ - 81 \\ \hline 1 \end{array}$$

$$\begin{array}{r} 16 \\ 48 \overline{) 799} \\ - 48 \\ \hline 319 \\ - 288 \\ \hline 31 \end{array}$$

2.

$$4982 \div 2 = 2491$$

Verification Dividend = Divisor \times
Quotient + Remainder

$$4982 = 2 \times 2491 + 0 \\ = 4982 \text{ Verified}$$

$$3984 \div 5 = 796$$

Verification Dividend = Divisor \times
Quotient + Remainder

$$3984 = 5 \times 796 + 4 \\ = 3984 \text{ Verified}$$

$$5746 \div 8 = 718$$

Verification Dividend = Divisor \times
Quotient + Remainder

$$5746 = 8 \times 718 + 2 \\ = 5746 \text{ Verified}$$

$$4058 \div 3 = 1352$$

Verification Dividend = Divisor \times
Quotient + Remainder

$$4058 = 3 \times 1352 + 2 \\ = 4058 \text{ Verified}$$



$84925 \div 3 = 28308$ Verification Dividend = Divisor \times Quotient + Remainder $84925 = 28308 \times 3 + 1$ = 84925 Verified	$9009 \div 9 = 1001$ Verification Dividend = Divisor \times Quotient + Remainder $9009 = 9 \times 1001 + 0$ = 9009 Verified
$7382 \div 6 = 1230$ Verification Dividend = Divisor \times Quotient + Remainder $7382 = 6 \times 1230 + 2$ = 7382 Verified	$8475 \div 8 = 1059$ Verification Dividend = Divisor \times Quotient + Remainder $8475 = 8 \times 1059 + 3$ = 8475 Verified
$9484 \div 5 = 1896$ Verification Dividend = Divisor \times Quotient + Remainder $9484 = 5 \times 1896 + 4$ = 9484 Verified	$4076 \div 4 = 1019$ Verification Dividend = Divisor \times Quotient + Remainder $4076 = 1019 \times 4 + 0$ = 4076 Verified
$8940 \div 7 = 1277$ Verification Dividend = Divisor \times Quotient + Remainder $8940 = 7 \times 1277 + 1$ = 8940 Verified	$9997 \div 9 = 1110$ Verification Dividend = Divisor \times Quotient + Remainder $9997 = 9 \times 1110 + 7$ = 9997 Verified

Practice Time

- a) 40 b) 40 c) 60 d) 60 e) 60 f) 90 g) 70
h) 10 i) 20 j) 10 k) 30 l) 0 m) 300 n) 490
o) 960
- a) 500 b) 900 c) 300 d) 800 e) 60 f) 90 g) 600
h) 900 i) 900 j) 100 k) 100 l) 100 m) 1000 n) 1100
o) 2800
- a) 5000 b) 3000 c) 6000 d) 2000 e) 5000 f) 3000 g) 13000
h) 9000 i) 8000 j) 63000 k) 1000 l) 8000 m) 4000 n) 3000
o) 2000





Scan Your Brain

I.

$$\begin{array}{r}
 3,00579 - [102314 \\
 + 98756] \\
 = 300759 - 201070 \\
 = 99,509
 \end{array}$$

$$\begin{array}{r}
 196 \\
 \times 5 \\
 \hline
 980
 \end{array}$$

$$\begin{array}{r}
 805 \\
 \times 4 \\
 \hline
 3220
 \end{array}$$

$$\begin{array}{r}
 45 \\
 550 \overline{) 24752} \\
 \underline{- 2200} \\
 2752 \\
 \underline{- 2750} \\
 2
 \end{array}$$

Hots Questions

1. 8500, 9000, 9500, 10000, 10,500

2. $7805 + 4651 + 3025 = 15481$ People visited the trade fair

No. of children = $15481 - 8292 = 7389$ children

Total sales = $8092 \times 25 + 7389 \times 15$

= $202,300 + 110,835 = ₹313,135$

3. 16, 24

4 Divisibility Tests

Answers

Practice Time

I. a)

233	292	389	578	446	299	406	100
188	106	327	281	658	111	911	681
305	211	4291	910	807	365	872	721





b)

109	181	525	781	645	817	611	809
234	179	323	999	110	702	443	712
288	165	301	812	212	102	515	540

c)

624	306	209	520	771	381	912	400
803	116	628	926	364	918	473	102
483	528	372	942	462	188	364	937

d)

300	937	505	293	372	210	840	901
119	415	644	902	630	534	785	605
800	323	728	945	828	380	110	546

e)

209	716	513	834	343	847	382	546
276	398	393	742	486	648	632	646
394	168	936	537	372	530	606	562

f)

109	427	394	185	819	108	396	755
837	809	720	362	175	252	753	945
454	990	493	414	595	374	558	154

g)

709	101	480	765	150	403	390	602
290	643	764	246	780	346	565	700
120	958	500	394	435	750	953	110





2.

Divisible by	2	3	4	5	6	9	10
3735		Y		Y		Y	
1164	Y	Y	Y		Y		
8937		Y					
2065				Y			
14200	Y		Y	Y			Y
9531		Y			Y		
32155				Y			
74326	Y						

3. a) 2, 3
b) 2
c) 2, 5
d) 2, 5, 10
e) 0, 2, 4, 6
f) the sum of all the digits of the number is divisible by 9

Hots Questions

180, 270





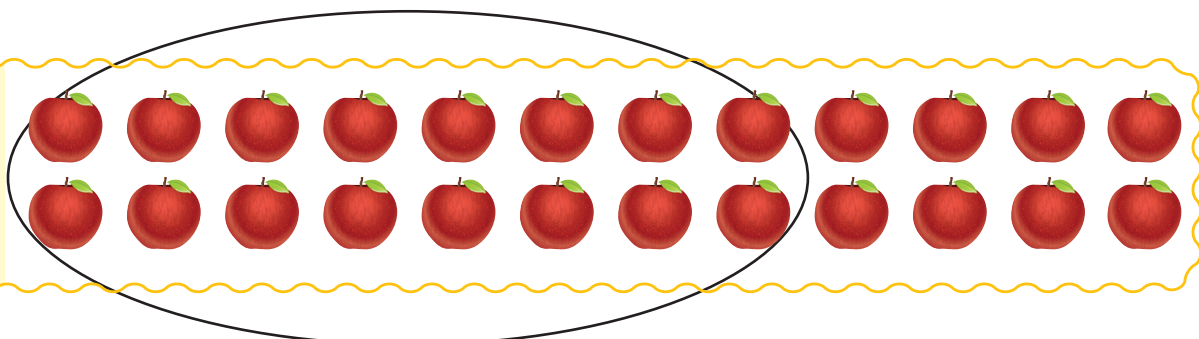
5 Fractions

Answers

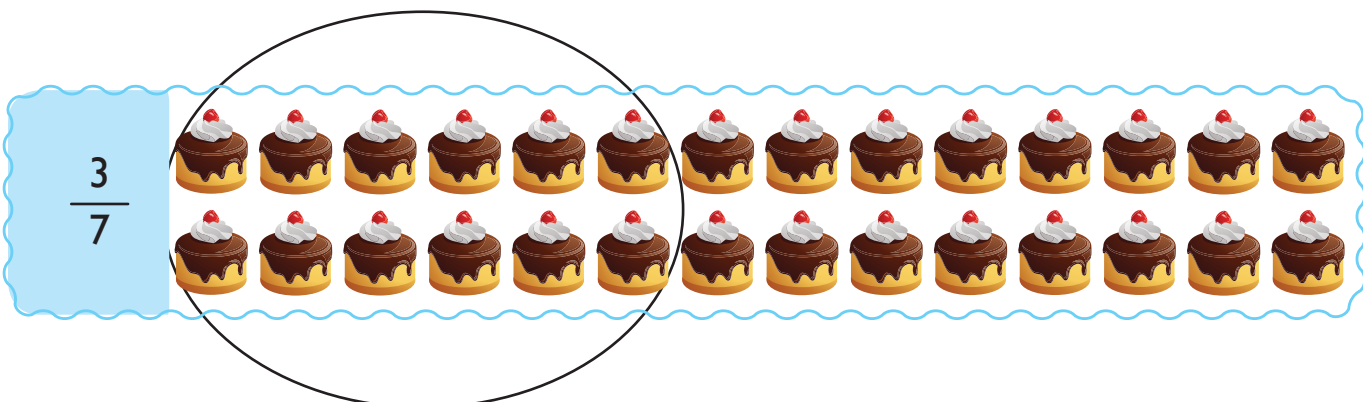
Practice Time

1.

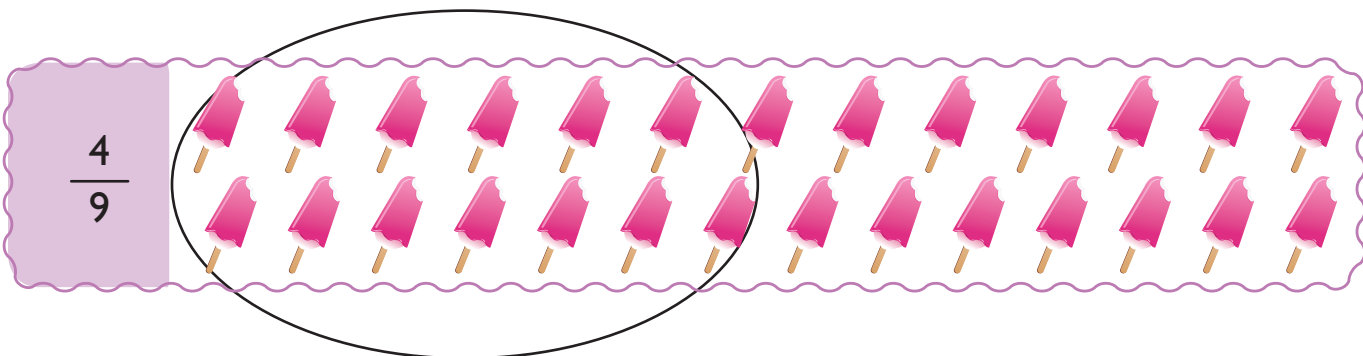
$$\frac{2}{3}$$



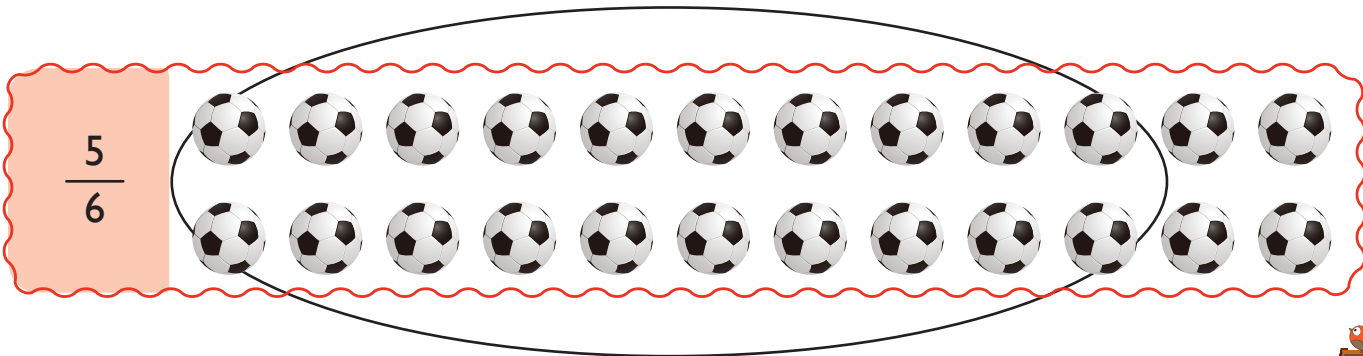
$$\frac{3}{7}$$

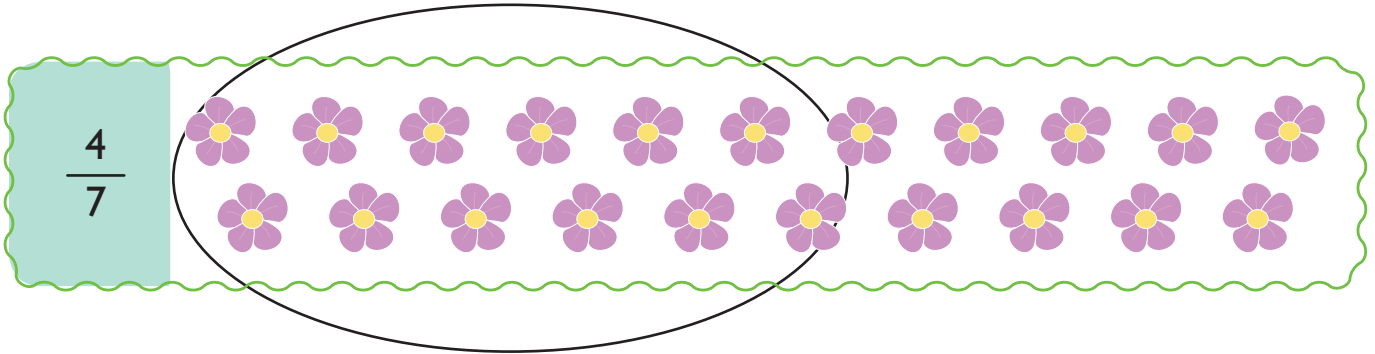
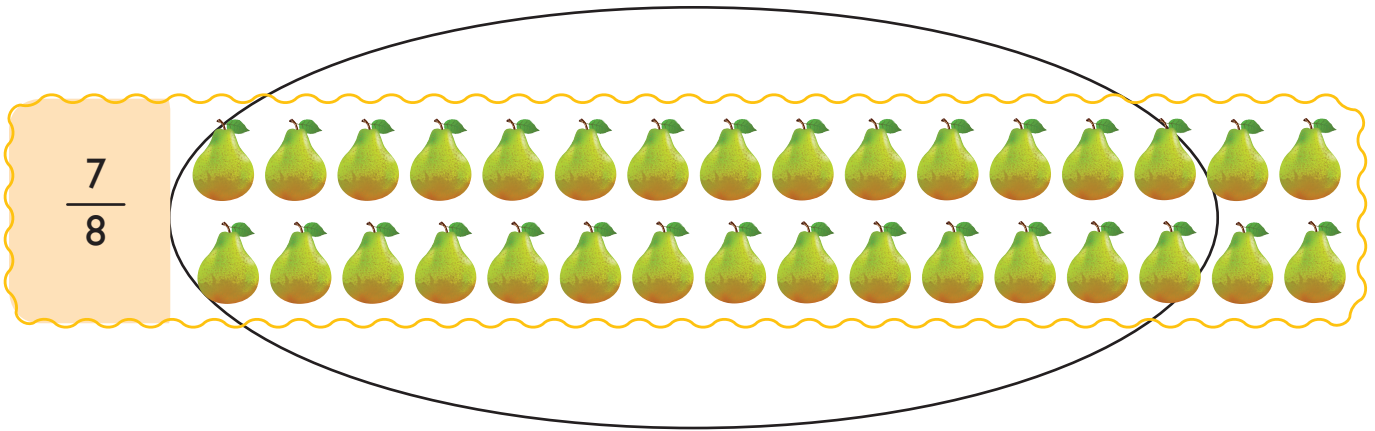


$$\frac{4}{9}$$



$$\frac{5}{6}$$





2.

$\frac{3}{5}$ of 40 chocolates

$$\frac{3}{5} \times 40 = \frac{3 \times 40}{5} = \frac{120}{5} = 24 \text{ chocolates}$$

$\frac{2}{3}$ of 36 pencils

$$\frac{2}{3} \times 36 = \frac{2 \times 36}{3} = \frac{72}{3} = 24 \text{ Pencils}$$

$\frac{1}{7}$ of 42 rings

$$\frac{1}{7} \times 42 = \frac{42}{7} = 6 \text{ rings}$$

$\frac{2}{9}$ of 36 windows

$$\frac{2}{9} \times 36 = \frac{2 \times 36}{9} = \frac{72}{9} = 8 \text{ windows}$$

$\frac{3}{4}$ of 72 cars

$$\frac{3}{4} \times 72 = \frac{3 \times 72}{4} = \frac{216}{4} = 54 \text{ cars}$$

$\frac{1}{3}$ of 54 umbrellas

$$\frac{1}{3} \times 54 = \frac{54}{3} = 18 \text{ umbrellas}$$





$\frac{6}{7}$ of 84 buses

$$\frac{6}{7} \times 84 = \frac{6 \times 84}{7} = \frac{504}{7} = 72 \text{ buses}$$

$\frac{3}{8}$ of 40 handkerchiefs

$$\frac{3}{8} \times 40 = \frac{3 \times 40}{8} = \frac{120}{8} = 15 \text{ handkerchiefs}$$

$\frac{4}{5}$ of 40 bags

$$\frac{4}{5} \times 40 = \frac{4 \times 40}{5} = \frac{160}{5} = 32 \text{ bags}$$

a) $\frac{3}{4} \dots \frac{9}{4}$ b) $\frac{4}{7} \dots \frac{2}{7}$ c) $\frac{12}{13} \dots \frac{6}{11}$

d) $\frac{5}{6} \dots \frac{7}{6}$

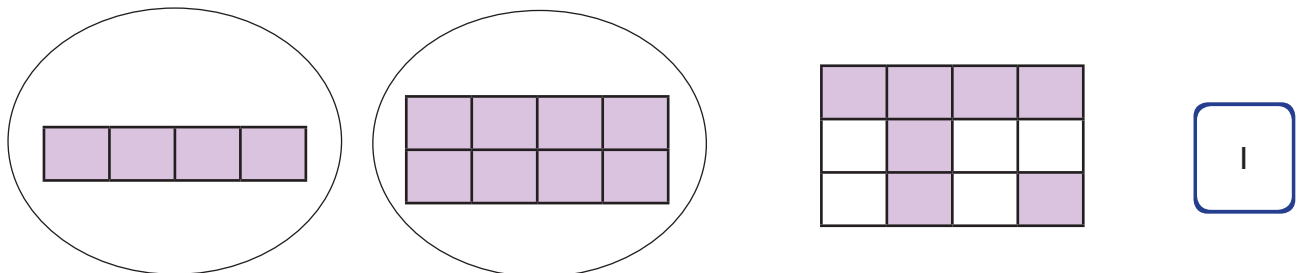
e) $\frac{6}{11} \dots \frac{5}{11}$ f) $\frac{7}{9} \dots \frac{5}{9}$ g) $\frac{8}{12} \dots \frac{7}{12}$

h) $\frac{6}{11} \dots \frac{2}{11}$

3.

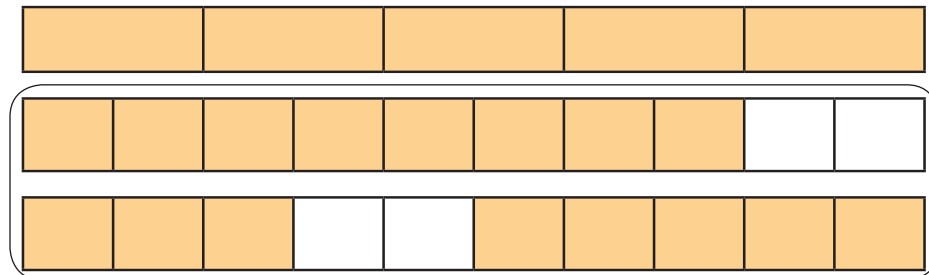
4.

a)



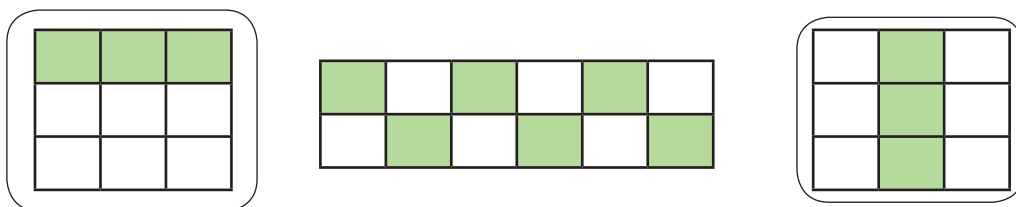
$$\frac{1}{4}$$

b)



$$\frac{8}{10}$$

c)

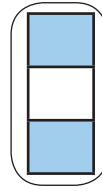
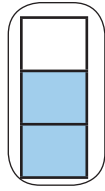
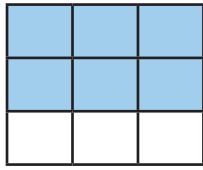


$$\frac{3}{9}$$



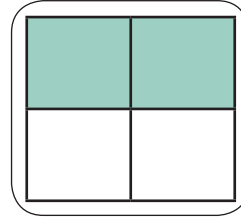
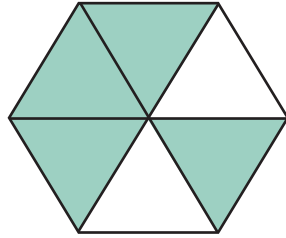
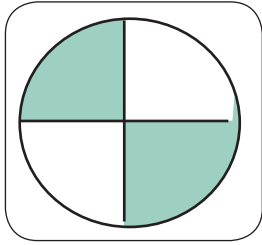


d)



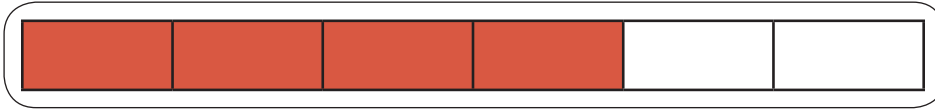
$$\frac{2}{3}$$

e)



$$\frac{2}{4}$$

f)



$$\frac{4}{6}$$

5.

a) $4\frac{2}{3}$ b) $3\frac{1}{2}$ c) $2\frac{1}{4}$ d) $1\frac{5}{7}$

e) $2\frac{3}{4}$ f) $2\frac{3}{5}$ g) $1\frac{3}{6}$ h) $1\frac{4}{7}$

i) $2\frac{1}{12}$ j) $6\frac{2}{5}$

6.

a) $\frac{7}{4}$ b) $\frac{18}{7}$ c) $\frac{7}{4}$ d) $\frac{5}{2}$

e) $\frac{23}{5}$ f) $\frac{16}{5}$ g) $\frac{22}{5}$ h) $\frac{21}{8}$

i) $\frac{11}{3}$ j) $\frac{20}{9}$





7. a)

n=	2	3	4	5	6	7	8	9	10
a x n =	6	9	12	15	18	21	24	27	30
b x n =	8	12	16	20	24	28	32	36	40
Equivalent ₃ Fraction of $\frac{3}{4}$	$\frac{6}{8}$	$\frac{9}{12}$	$\frac{12}{16}$	$\frac{15}{20}$	$\frac{18}{24}$	$\frac{21}{28}$	$\frac{24}{32}$	$\frac{27}{36}$	$\frac{30}{40}$

b)

n=	2	3	4	5	6	7	8	9	10
a x n =	4	6	8	10	12	14	16	18	20
b x n =	10	15	20	25	30	35	40	45	50
Equivalent ₂ Fraction of $\frac{2}{5}$	$\frac{4}{10}$	$\frac{6}{15}$	$\frac{8}{20}$	$\frac{10}{25}$	$\frac{12}{30}$	$\frac{14}{35}$	$\frac{16}{40}$	$\frac{18}{45}$	$\frac{20}{50}$

c)

n=	2	3	4	5	6	7	8	9	10
a x n =	2	3	4	5	6	7	8	9	10
b x n =	12	18	24	30	36	42	48	54	60
Equivalent ₁ Fraction of $\frac{1}{6}$	$\frac{2}{12}$	$\frac{3}{18}$	$\frac{4}{24}$	$\frac{5}{30}$	$\frac{6}{36}$	$\frac{7}{42}$	$\frac{8}{48}$	$\frac{9}{54}$	$\frac{10}{60}$

d)

n=	2	3	4	5	6	7	8	9	10
a x n =	4	6	8	10	12	14	16	18	20
b x n =	14	21	28	35	42	49	56	63	70
Equivalent ₂ Fraction of $\frac{2}{7}$	$\frac{4}{14}$	$\frac{6}{21}$	$\frac{8}{28}$	$\frac{10}{35}$	$\frac{12}{42}$	$\frac{14}{49}$	$\frac{16}{56}$	$\frac{18}{63}$	$\frac{20}{70}$





e)

n=	2	3	4	5	6	7	8	9	10
a x n =	8	12	16	20	24	28	32	36	40
b x n =	10	15	20	25	30	35	40	45	50
Equivalent ₄ Fraction of $\frac{4}{5}$	$\frac{8}{10}$	$\frac{12}{15}$	$\frac{16}{20}$	$\frac{20}{25}$	$\frac{24}{30}$	$\frac{28}{35}$	$\frac{32}{40}$	$\frac{36}{45}$	$\frac{40}{50}$

f)

n=	2	3	4	5	6	7	8	9	10
a x n =	2	3	4	5	6	7	8	9	10
b x n =	6	9	12	15	18	21	24	27	30
Equivalent ₁ Fraction of $\frac{1}{3}$	$\frac{2}{6}$	$\frac{3}{9}$	$\frac{4}{12}$	$\frac{5}{15}$	$\frac{6}{18}$	$\frac{7}{21}$	$\frac{8}{24}$	$\frac{9}{27}$	$\frac{10}{30}$

8. a)

$$\frac{2}{3} = \frac{\textcircled{4}}{\textcircled{6}} = \frac{\textcircled{6}}{\textcircled{9}} = \frac{\textcircled{8}}{\textcircled{12}} = \frac{\textcircled{10}}{\textcircled{15}} = \frac{\textcircled{12}}{\textcircled{18}} = \frac{\textcircled{14}}{\textcircled{21}}$$

b)

$$\frac{1}{5} = \frac{\textcircled{2}}{\textcircled{10}} = \frac{\textcircled{3}}{\textcircled{15}} = \frac{\textcircled{4}}{\textcircled{20}} = \frac{\textcircled{5}}{\textcircled{25}} = \frac{\textcircled{6}}{\textcircled{30}} = \frac{\textcircled{7}}{\textcircled{35}}$$

c)

$$\frac{3}{2} = \frac{\textcircled{6}}{\textcircled{4}} = \frac{\textcircled{9}}{\textcircled{6}} = \frac{\textcircled{12}}{\textcircled{8}} = \frac{\textcircled{15}}{\textcircled{10}} = \frac{\textcircled{18}}{\textcircled{12}} = \frac{\textcircled{21}}{\textcircled{14}}$$

d)

$$\frac{4}{7} = \frac{\textcircled{8}}{\textcircled{14}} = \frac{\textcircled{12}}{\textcircled{21}} = \frac{\textcircled{16}}{\textcircled{28}} = \frac{\textcircled{20}}{\textcircled{35}} = \frac{\textcircled{24}}{\textcircled{42}} = \frac{\textcircled{28}}{\textcircled{49}}$$

e)

$$\frac{5}{8} = \frac{\textcircled{10}}{\textcircled{16}} = \frac{\textcircled{15}}{\textcircled{24}} = \frac{\textcircled{20}}{\textcircled{32}} = \frac{\textcircled{25}}{\textcircled{40}} = \frac{\textcircled{30}}{\textcircled{48}} = \frac{\textcircled{35}}{\textcircled{56}}$$

Practice Time

1.a) $\frac{5}{9} > \frac{3}{9}$

b) $\frac{1}{9} < \frac{7}{9}$

c) $\frac{11}{3} > \frac{11}{15}$

d) $\frac{6}{25} < \frac{8}{25}$





e) $\frac{7}{10} < \frac{7}{5}$ f) $\frac{13}{24} < \frac{13}{15}$ g) $\frac{5}{20} = \frac{1}{4}$ h) $\frac{10}{14} > \frac{11}{20}$

i) $\frac{9}{23} > \frac{8}{23}$ j) $\frac{1}{7} = \frac{3}{21}$ k) $\frac{3}{5} = \frac{15}{25}$ l) $\frac{2}{9} < \frac{8}{9}$

2. a) $\frac{6}{7}, \frac{5}{7}, \frac{4}{7}, \frac{3}{7}, \frac{2}{7}, \frac{1}{7}$

b) $\frac{9}{11}, \frac{6}{11}, \frac{4}{11}, \frac{3}{11}, \frac{2}{11}, \frac{1}{11}$

c) $\frac{3}{2}, \frac{3}{4}, \frac{3}{5}, \frac{2}{4}, \frac{3}{7}, \frac{3}{9}$

d) $\frac{7}{8}, \frac{7}{12}, \frac{7}{14}, \frac{7}{20}, \frac{7}{21}, \frac{7}{32}$

e) $\frac{1}{2}, \frac{1}{3}, \frac{1}{7}, \frac{1}{13}, \frac{1}{21}, \frac{1}{23}$

3.

a) $\frac{1}{7}, \frac{3}{7}, \frac{4}{7}, \frac{12}{7}, \frac{15}{7}, \frac{24}{7}$

b) $\frac{1}{9}, \frac{3}{9}, 1, \frac{11}{9}, \frac{28}{9}, \frac{54}{9}$

c) $\frac{8}{11}, \frac{8}{9}, \frac{8}{7}, \frac{8}{4}, \frac{8}{3}, \frac{8}{2}$

d) $\frac{4}{5}, 1\frac{2}{5}, 2\frac{1}{5}, \frac{9}{5}, \frac{13}{5}$

e) $\frac{5}{15}, \frac{5}{13}, \frac{5}{11}, \frac{5}{7}, \frac{5}{6}, \frac{5}{2}$

Practice Time

1. a) $\frac{5}{8}$

b) $\frac{12}{12}$

c) $\frac{7}{9}$

d) $\frac{18}{20}$

e) $\frac{25}{17}$

f) $\frac{54}{7}$

g) $\frac{26}{5}$

h) $\frac{14}{10}$

i) $\frac{34}{8}$

j) $\frac{50}{15}$

k) $\frac{30}{5}$

l) $\frac{30}{22}$

m) $\frac{14}{6}$

n) $\frac{30}{7}$

o) $\frac{24}{18}$

2.

a) $\frac{2}{10}$

b) $\frac{2}{12}$

c) $\frac{5}{21}$





- | | | |
|--------------------|-------------------|--------------------|
| d) | e) $\frac{13}{7}$ | f) $\frac{37}{13}$ |
| g) $\frac{18}{11}$ | h) | i) $\frac{3}{7}$ |
| j) $\frac{8}{10}$ | k) $\frac{28}{8}$ | l) $\frac{7}{14}$ |
| m) $\frac{12}{7}$ | n) $\frac{26}{9}$ | o) $\frac{8}{11}$ |

3.

- | | | |
|--------------------|---------------------|---------------------|
| a) $\frac{3}{25}$ | b) $\frac{25}{42}$ | c) $\frac{3}{24}$ |
| d) $\frac{12}{56}$ | e) $\frac{3}{63}$ | f) $\frac{88}{143}$ |
| g) $\frac{12}{56}$ | h) $\frac{26}{135}$ | i) $\frac{99}{143}$ |
| j) $\frac{28}{56}$ | k) $\frac{30}{55}$ | l) $\frac{63}{135}$ |
| m) $\frac{15}{35}$ | n) $\frac{96}{21}$ | o) $\frac{27}{25}$ |

Scan Your Brain

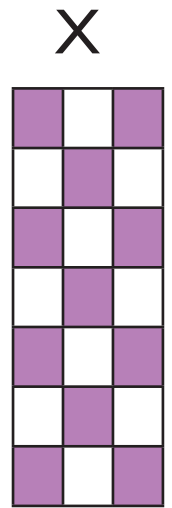
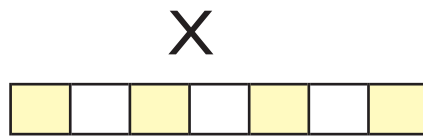
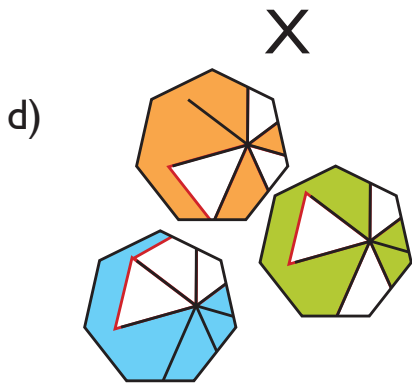
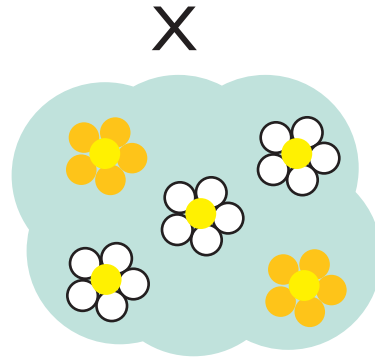
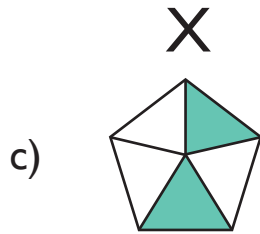
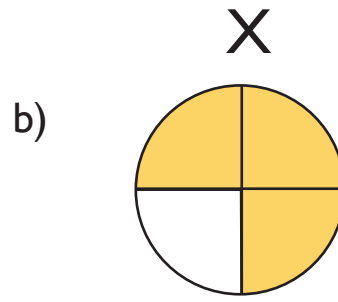
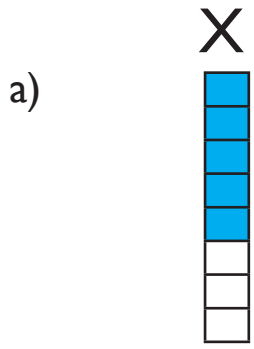
I.

$\frac{9}{10}$	$\frac{11}{2}$	$\frac{7}{9}$	$\frac{7}{6}$	$\frac{8}{3}$	$\frac{13}{15}$	$\frac{3}{5}$
$\frac{5}{2}$	$\frac{4}{3}$	$3\frac{6}{7}$	$7\frac{2}{9}$	$\frac{12}{5}$	$1\frac{2}{5}$	$\frac{18}{17}$
$8\frac{5}{6}$	$5\frac{4}{9}$	$\frac{26}{31}$	$\frac{37}{6}$	$\frac{1}{6}$	$\frac{1}{11}$	$3\frac{1}{3}$

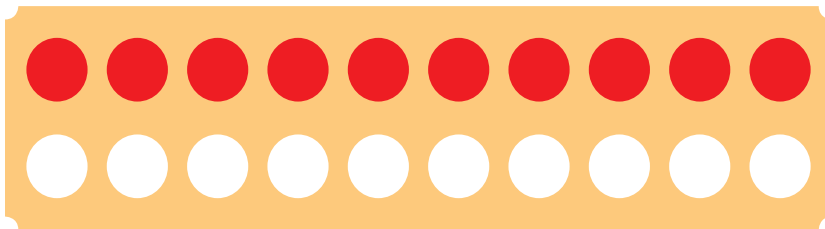




2.



3. a)

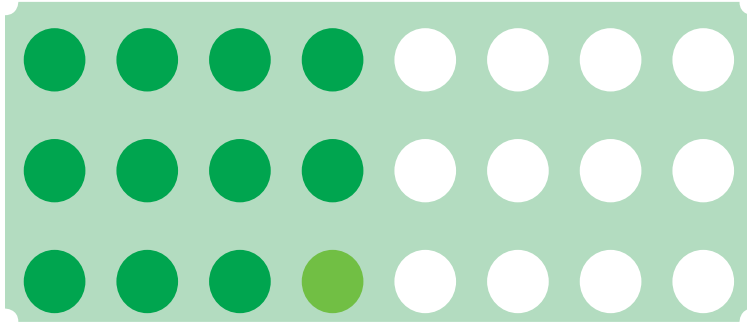


b)

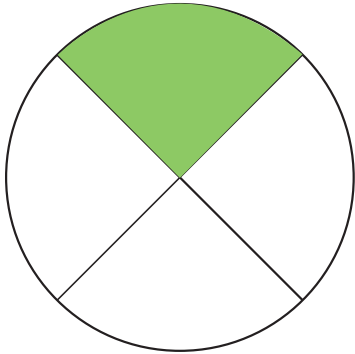




c)



d)



4. a) $\frac{2}{7} < \frac{6}{7}$ b) $1\frac{3}{4} < 2\frac{1}{4}$ c) $\frac{6}{11} < 1\frac{2}{11}$
 d) $2\frac{2}{3} > 1\frac{2}{3}$ e) $\frac{24}{12} < 2\frac{1}{12}$ f) $\frac{7}{2} = 3\frac{1}{2}$

5. a) $\frac{3}{5} \times 10 = 6 \text{ m}$
 b) $\frac{1}{4} + \frac{3}{4} + 1\frac{1}{4}$
 $\frac{1}{4} + \frac{3}{4} + \frac{5}{4} = \frac{9}{4}$
 c) $\frac{8}{3} - \frac{2}{3} = \frac{6}{3} \text{ litres}$

Hots Questions

1. a) $\frac{1}{5} = \frac{\textcircled{2}}{\textcircled{10}} = \frac{\textcircled{3}}{\textcircled{15}} = \frac{\textcircled{4}}{\textcircled{20}} = \frac{\textcircled{5}}{\textcircled{25}} = \frac{\textcircled{6}}{\textcircled{30}} = \frac{\textcircled{7}}{\textcircled{35}}$
 b) $\frac{1}{7} = \frac{\textcircled{2}}{\textcircled{14}} = \frac{\textcircled{3}}{\textcircled{21}} = \frac{\textcircled{7}}{\textcircled{49}} = \frac{\textcircled{5}}{\textcircled{35}} = \frac{\textcircled{6}}{\textcircled{42}} = \frac{\textcircled{12}}{\textcircled{84}}$





c) $\frac{2}{8} = \frac{\textcircled{1}}{\textcircled{4}} = \frac{\textcircled{3}}{\textcircled{12}} = \frac{\textcircled{4}}{\textcircled{16}} = \frac{\textcircled{5}}{\textcircled{20}} = \frac{\textcircled{6}}{\textcircled{24}} = \frac{\textcircled{7}}{\textcircled{28}}$

d) $\frac{3}{9} = \frac{\textcircled{2}}{\textcircled{6}} = \frac{\textcircled{1}}{\textcircled{3}} = \frac{\textcircled{9}}{\textcircled{27}} = \frac{\textcircled{7}}{\textcircled{21}} = \frac{\textcircled{5}}{\textcircled{15}} = \frac{\textcircled{6}}{\textcircled{18}}$

e) $\frac{2}{3} = \frac{\textcircled{12}}{\textcircled{18}} = \frac{\textcircled{6}}{\textcircled{9}} = \frac{\textcircled{24}}{\textcircled{36}} = \frac{\textcircled{10}}{\textcircled{15}} = \frac{\textcircled{12}}{\textcircled{18}} = \frac{\textcircled{42}}{\textcircled{63}}$

6 HCF and LCM

I. Answers

Practice Time

21 and 28

Factors of 21 = 1, 3, 7, 21

Factors of 28 = 1, 2, 4, 7, 14, 28

Common factors = 1, 7

HCF of 21 and 28 = 7

34 and 20

Factors of 34 = 1, 2, 17, 34

Factors of 20 = 1, 2, 4, 5, 10, 20

Common factors = 1, 2

HCF of 34 and 20 = 2

74 and 46

Factors of 74 = 1, 2, 37, 74

Factors of 46 = 1, 2, 23, 46

Common factors = 1, 2

HCF of 74 and 46 = 2

24 and 36

Factors of 24 = 1, 2, 3, 4, 6, 12, 24

Factors of 36 = 1, 2, 3, 4, 6, 9, 12, 36

Common factors = 1, 2

HCF of 24 and 36 = 12

64 and 72

Factors of 64 = 1, 2, 4, 8, 16, 32, 64,

Factors of 72 = 1, 2, 3, 4, 6, 8, 9, 12, 18, 36, 72

Common factors = 1, 2, 4, 8

HCF of 64 and 72 = 8

81 and 63

Factors of 81 = 1, 3, 9, 81

Factors of 63 = 1, 3, 7, 9, 63

Common factors = 1, 3, 9

HCF of 81 and 63 = 9



21 and 35

Factors of 21 = 1, 3, 7, 21

Factors of 35 = 1, 5, 7, 35

Common factors = 1, 7

HCF of 21 and 35 = 7

14 and 18

Factors of 14 = 1, 2, 7, 14

Factors of 18 = 1, 2, 3, 6, 9, 18

Common factors = 1, 2

HCF of 14 and 18 = 2

55 and 80

Factors of 55 = 1, 5, 11, 55

Factors of 80 = 1, 2, 4, 5, 8, 10, 16,
40, 80

Common factors = 1, 5

HCF of 55 and 80 = 5

33 and 39

Factors of 33 = 1, 3, 11, 33

Factors of 39 = 1, 3, 13, 39

Common factors = 1, 3

HCF of 33 and 39 = 3

Practice Time

I.

a) 3 and 8

Multiple of 3 = 3, 6, 9, 12, 15, 18, 24

Multiple of 8 = 2, 4, 6, 8, 10

LCM of 3 and 8 = 24

b) 5 and 9

Multiple of 5 = 5, 10, 15, 20

Multiple of 9 = 9, 18, 27, 36, 45

LCM of 5 and 9 = 45

c) 6 and 4

Multiple of 6 = 6, 12, 18, 24

Multiple of 4 = 4, 8, 12, 16

LCM of 6 and 4 = 12

d) 9 and 11

Multiple of 9 = 9, 18, 27, 36

Multiple of 11 = 11, 22, 33

LCM of 9 and 11 = 99

e) 12 and 7

Multiple of 12 = 12, 24, 36, 48

Multiple of 7 = 7, 14, 21, 28

LCM of 12 and 7 = 84

f) 8 and 13

Multiple of 8 = 8, 16, 24

Multiple of 13 = 13, 26, 39

LCM of 8 and 13 = 104

g) 11 and 5

Multiple of 11 = 11, 22, 33, 44, 55

h) 4 and 12

Multiple of 4 = 4, 8, 12, 16





Multiple of 5 = 5, 10, 15, 20

LCM of 11 and 5 = 55

Multiple of 12 = 12, 24, 36, 48

LCM of 4 and 12 = 12

i) 2 and 13

Multiple of 2 = 2, 4, 6, 8, 10

Multiple of 13 = 13, 26, 39

LCM of 2 and 13 = 26

j) 14 and 3

Multiple of 14 = 14, 28, 42, 56

Multiple of 3 = 3, 6, 9, 12, 15, 18

LCM of 14 and 3 = 42

k) 6 and 9

Multiple of 6 = 6, 12, 18

Multiple of 9 = 9, 18, 27

LCM of 6 and 9 = 18

l) 6 and 15

Multiple of 6 = 6, 12, 18, 24, 30

Multiple of 15 = 15, 30

LCM of 6 and 15 = 30

Hots Questions

The HCF of two or more prime numbers is always 1.

7 Multiples and Factors

Answers

Practice Time

1. a) 18, 27, 36, 45, 54

b) 14, 21, 28, 35, 42

c) 28, 42, 56, 70, 84

d) 12, 18, 24, 30, 36

e) 26, 39, 52, 65, 78

f) 38, 57, 76, 95, 114

2.

Number	Factors
18	1, 2, 3, 6, 9, 18
39	1, 3, 13, 39
28	1, 2, 4, 7, 14, 28
65	1, 5, 13, 65
48	1, 2, 3, 4, 6, 12, 24, 48
50	1, 5, 10, 25, 50
54	1, 2, 3, 6, 9, 18, 27, 54
75	1, 3, 5, 15, 25, 75

Number	Factors
38	1, 2, 19, 38
25	1, 5, 25
27	1, 3, 9, 27
32	1, 2, 4, 8, 16, 32
16	1, 2, 4, 8, 16
33	1, 3, 11, 33
29	1, 29
72	1, 2, 3, 4, 6, 8, 9, 12, 18, 24, 36, 72





3.

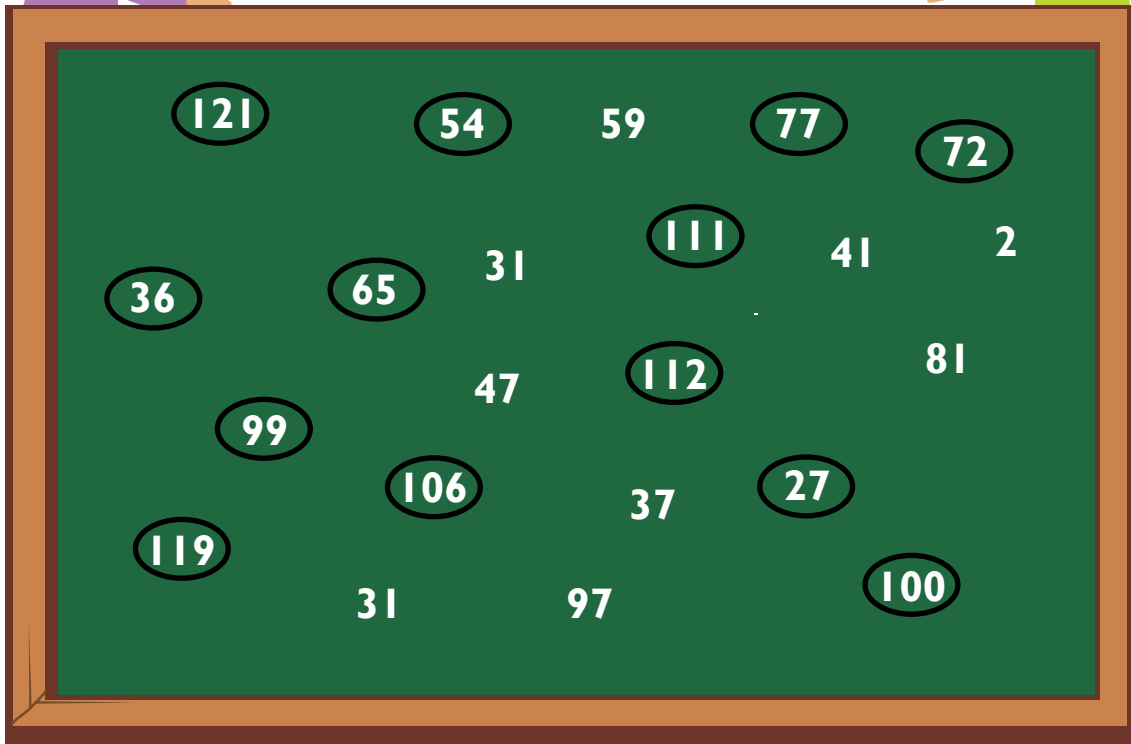
	12	27	4	2	18
	1	14	8	13	36
7	5	3	10	15	54
16	11	22	13	30	18
21	20	28	19	25	8
17	14	15	8	108	6
11	7	13	14		
8	11	22	19		

4. a) 12, 24, 36, 48, 60
c) 6, 12, 18, 24, 30

- b) 10, 20, 30, 40, 50
d) 12, 24, 36, 48, 60

Practice Time

1.

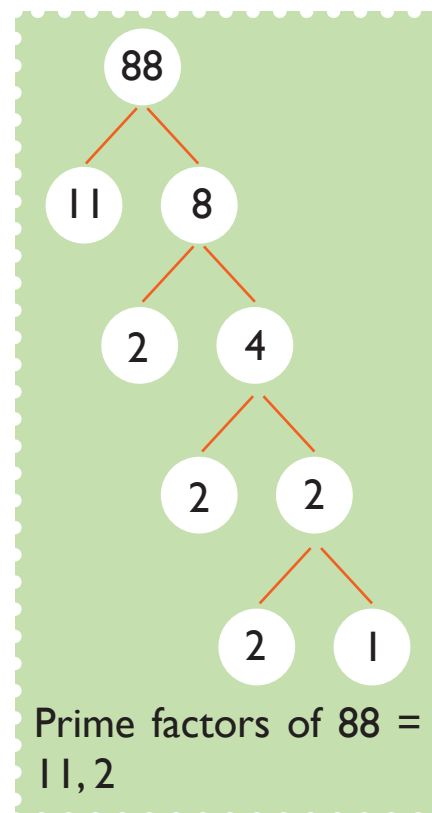
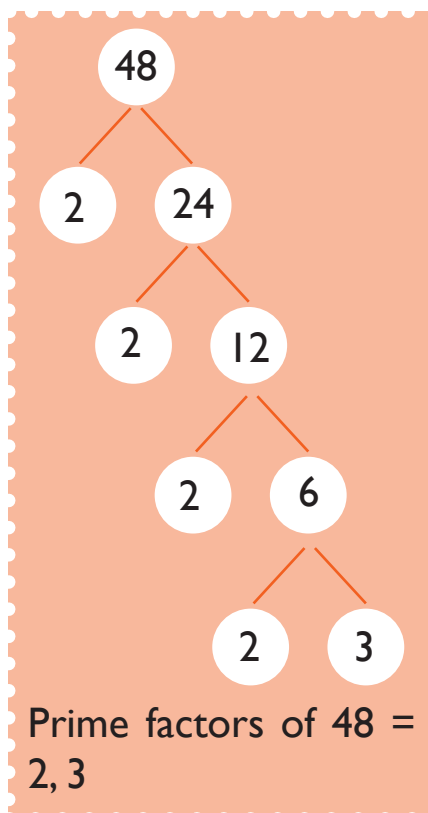
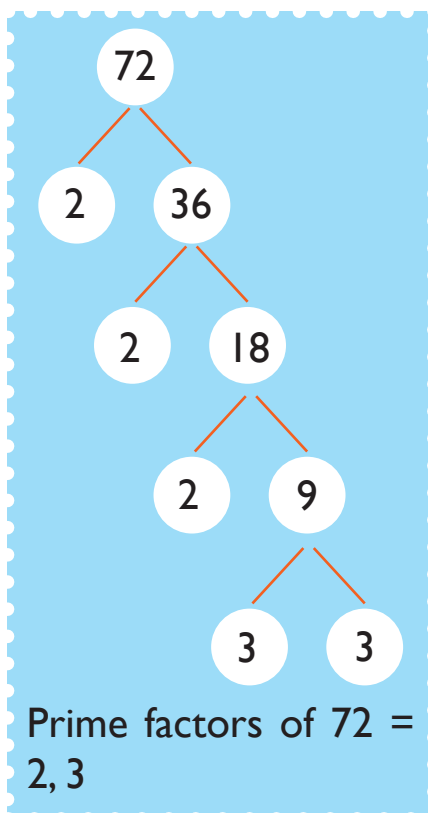
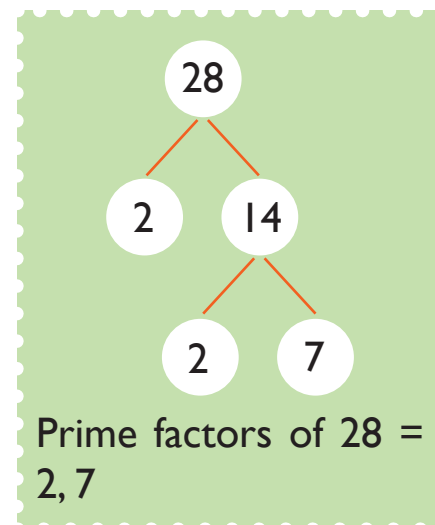
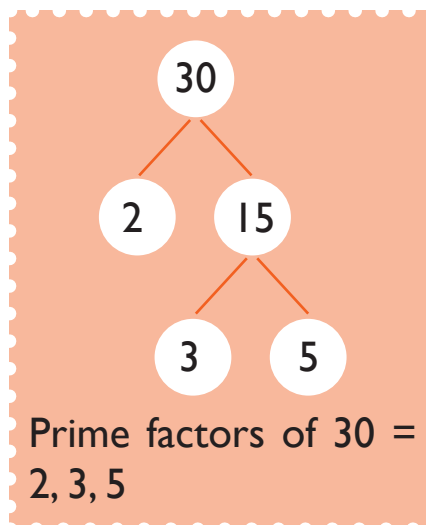
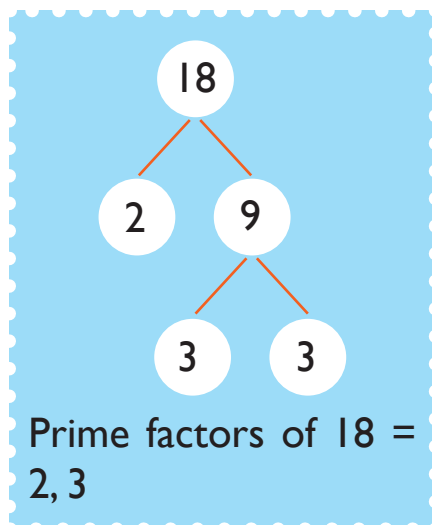
Numbers on the chalkboard:

- 121 (circled)
- 54 (circled)
- 59
- 77 (circled)
- 72 (circled)
- 36 (circled)
- 65 (circled)
- 31
- 111 (circled)
- 41
- 2
- 99 (circled)
- 47
- 112 (circled)
- 81
- 106 (circled)
- 37
- 27 (circled)
- 119 (circled)
- 31
- 97
- 100 (circled)





2.



3.

62 and 64
Factors of 62 = 1, 2, 31, 62
Factors of 64 = 1, 2, 4, 8, 16, 32, 64
Common factors are 1, 2,

80 and 100
Factors of 80 = 1, 2, 4, 5, 8, 10, 20, 40, 80
Factors of 100 = 1, 2, 5, 10, 20, 50, 100
Common factors are 1, 2, 5, 10, 20,





57 and 42

Factors of 57 = 1, 3, 19, 57

Factors of 42 = 1, 2, 3, 6, 7, 21, 42

Common factors are 1, 3

77 and 121

Factors of 77 = 1, 7, 11, 77

Factors of 121 = 1, 11, 121

Common factors are 1, 11

42 and 39

Factors of 42 = 1, 2, 3, 6, 7, 21, 42

Factors of 39 = 1, 3, 13, 39

Common factors are 1, 3

52 and 78

Factors of 52 = 1, 2, 4, 13, 26, 52

Factors of 78 = 1, 2, 3, 6, 39, 78

Common factors are 1, 2

4.

2 and 4

Multiples of 2 = 2, 4, 6, 8, 10, 12, 14,
16, 18, 20

Multiples of 4 = 4, 8, 12, 16, 20, 24,
28, 32, 36, 40

Common factors are 4, 8, 16, 20,

4 and 12

Multiples of 4 = 4, 8, 12, 16, 20, 24,
28, 32, 36, 40

Multiples of 12 = 12, 24, 36, 48, 60,
72, 84, 96, 108, 120

Common factors are 12, 24, 36

5 and 10

Multiples of 5 = 5, 10, 15, 20, 25, 30,
35, 40, 45, 50

Multiples of 10 = 10, 20, 30, 40, 50,
60, 70, 80, 90, 100

Common factors are 10, 20, 30, 40, 50,

7 and 9

Multiples of 7 = 7, 14, 21, 28, 35, 42,
49, 56, 63, 70

Multiples of 9 = 9, 18, 27, 36, 45, 54,
63, 72, 81, 90

Common factor are 63



3 and 9

Multiples of 3 = 3, 6, 9, 12, 15, 18, 21, 24, 27, 30

Multiples of 9 = 9, 18, 27, 36, 45, 54, 63, 72, 81, 90

Common factors are 9, 8, 27

6 and 8

Multiples of 6 = 6, 12, 18, 24, 30, 36, 42, 48, 54, 60

Multiples of 8 = 8, 16, 24, 32, 40, 48, 56, 64, 72, 80

Common factors are 24, 48

Scan Your Brain

1.

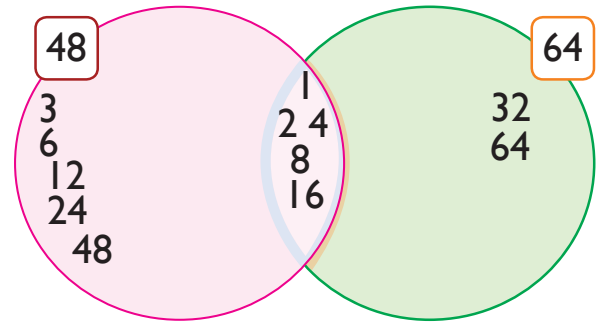
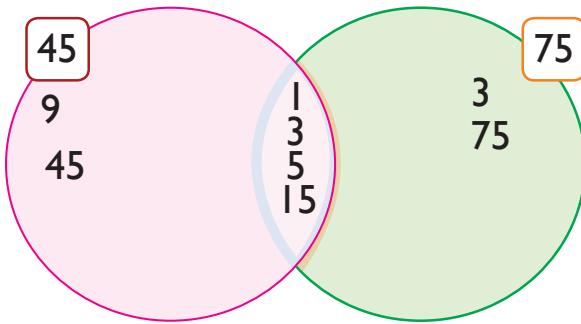
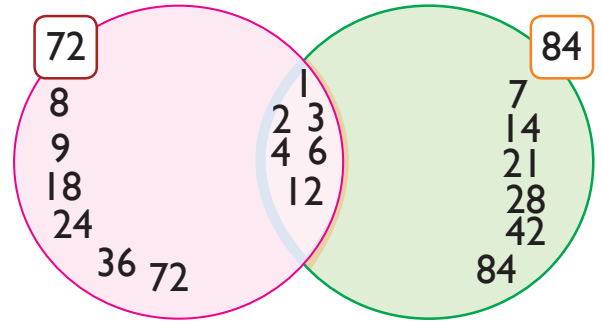
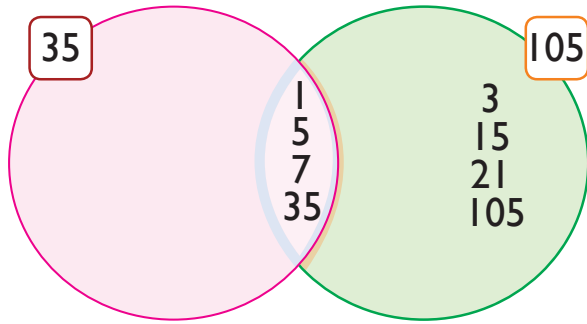
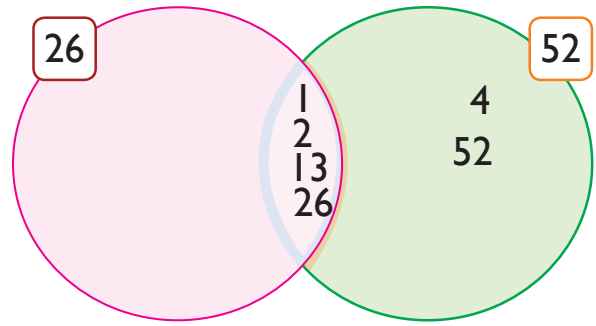
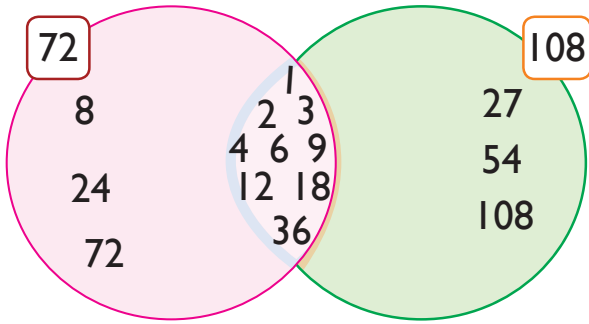
Numbers	Factors	Greatest Factor	Smallest factor
30	1, 2, 3, 5, 6, 10, 15, 30	30	1
78	1, 2, 3, 6, 13, 26, 39, 78	78	1
84	1, 2, 3, 4, 6, 7, 12, 14, 21, 28, 42, 84	84	1
96	1, 2, 3, 4, 6, 8, 12, 16, 24, 32, 48, 96	96	1
62	1, 2, 31, 62	62	1
39	1, 3, 13, 39	39	1

2. a) 10, 20, 30, 40, 50, 60, 70, 80, 90, 100
 b) 7, 14, 21, 28, 35, 42, 49, 56, 63, 70
 c) 13, 26, 39, 42, 65, 78, 91, 104, 117, 130
 d) 19, 38, 57, 76, 95, 114, 133, 152, 171, 190
 e) 21, 42, 63, 84, 105, 126, 147, 168, 189, 210
 f) 3, 6, 9, 12, 15, 18, 21, 24, 27, 30

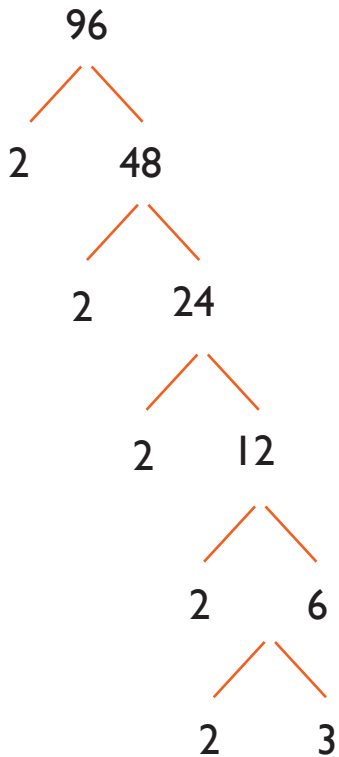




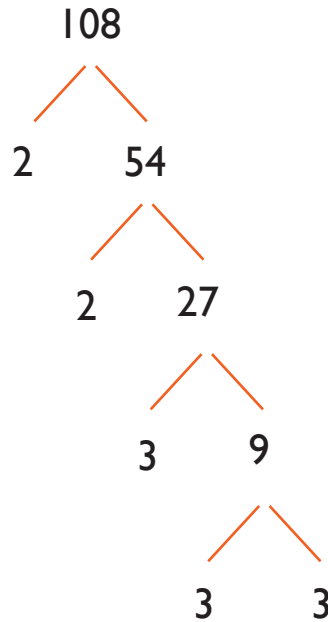
3.

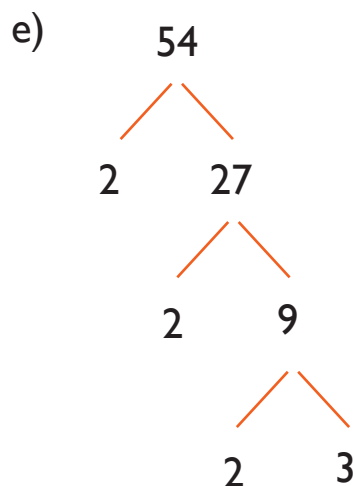
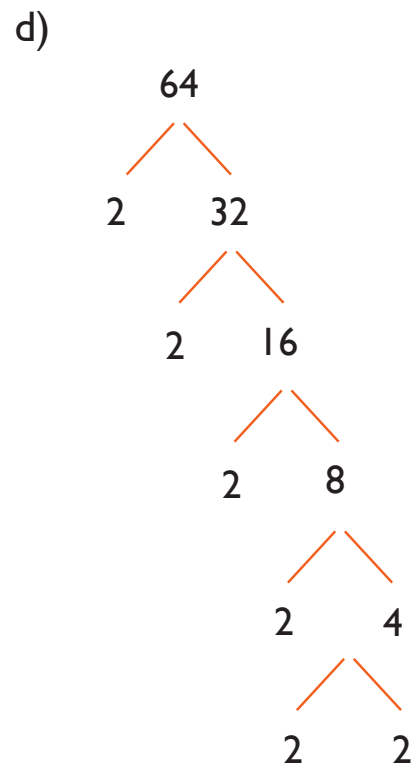
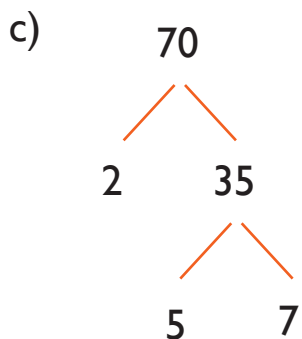


4. a)



b)





5. 53, 59, 61, 67, 71, 73, 79, 83, 89, 97

6. 4, 6, 8, 9, 10, 12, 14, 15, 16, 18, 20, 21, 22, 24, 25, 26, 27, 28, 30, 32, 33, 34, 35, 36, 38, 39, 40, 42, 44, 45, 46, 48, 49, 50

Hots Questions

1. a) 2 b) 4 c) 2 d) 1

e) 3 f) 15 and 28; 5 and 12. g) 3 and 5; 5 and 7.





8 Decimals

Answers

Practice Time

- 1.
- | | | | |
|--|--|--|--|
| Fraction: $\frac{6}{10}$
Decimal: 0.6 | Fraction: $\frac{7}{10}$
Decimal: 0.7 | Fraction: $\frac{5}{10}$
Decimal: 0.5 | Fraction: $\frac{3}{10}$
Decimal: 0.3 |
|--|--|--|--|

- | | | | |
|--|--|--|--|
| Fraction: $\frac{4}{10}$
Decimal: 0.4 | Fraction: $\frac{7}{10}$
Decimal: 0.7 | Fraction: $\frac{1}{10}$
Decimal: 0.1 | Fraction: $\frac{2}{10}$
Decimal: 0.2 |
|--|--|--|--|

- 2.
- | | | |
|---|---|---|
| Fraction: $\frac{29}{100}$
Decimal: 0.29 | Fraction: $\frac{54}{100}$
Decimal: 0.54 | Fraction: $\frac{46}{100}$
Decimal: 0.46 |
|---|---|---|

- | | | |
|---|---|---|
| Fraction: $\frac{56}{100}$
Decimal: 0.56 | Fraction: $\frac{68}{100}$
Decimal: 0.68 | Fraction: $\frac{17}{100}$
Decimal: 0.17 |
|---|---|---|

- | | |
|---|---|
| Fraction: $\frac{52}{100}$
Decimal: 0.52 | Fraction: $\frac{24}{100}$
Decimal: 0.24 |
|---|---|

- 3.
- | | |
|---|--------------------------------|
| a) Two point nine | b) Three point one two |
| c) Zero point four five | d) One point zero seven |
| e) Nine point seven two one | f) Eight point zero five three |
| g) Three point zero zero four | h) One point nine two |
| i) Eight hundred seventeen point six three | |
| j) Six hundred thirty five point zero zero nine | |
| k) One thousand six point zero two three | |
| l) Thirty point zero zero five | |
| m) One thousand nineteen point two zero five | |





- n) Two hundred thirty six point one zero seven
o) Zero point zero zero four

4.

Number	Thousands	Hundreds	Tens	Ones	Tenths	Hundredths	Thousandths
43.02			4	3	0	2	
27.352			2	7	3	5	2
16.053			1	6	0	5	3
0.239				0	2	3	9
1.009				1	0	0	9
1012.23		1	0	1	2	3	
1122.334	1	1	2	2	3	3	
393.823		3	9	3	8	2	3
1001.005	1	0	0	1	0	0	5
3.902				3	9	0	2

5. a) 234.05, 24.3, 0.93, 1.36, 0.02 b) 0.1, 34.03, 0.72, 28.39, 1.005

6. c) 800.7, 217.82, 32.231, 3265.25, 42.65 d) 25.071, 0.257, 0.319, 1.4, 24.3

a) $34 \frac{2}{10}$ b) $382 \frac{45}{100}$ c) $25 \frac{5}{100}$ d) $65 \frac{26}{1000}$

e) $\frac{9}{10}$ f) $100 \frac{6}{1000}$ g) $\frac{12}{100}$ h) $27 \frac{230}{1000}$

i) $5 \frac{5}{1000}$ j) $\frac{5}{1000}$ k) $6 \frac{354}{1000}$ l) $\frac{45}{100}$

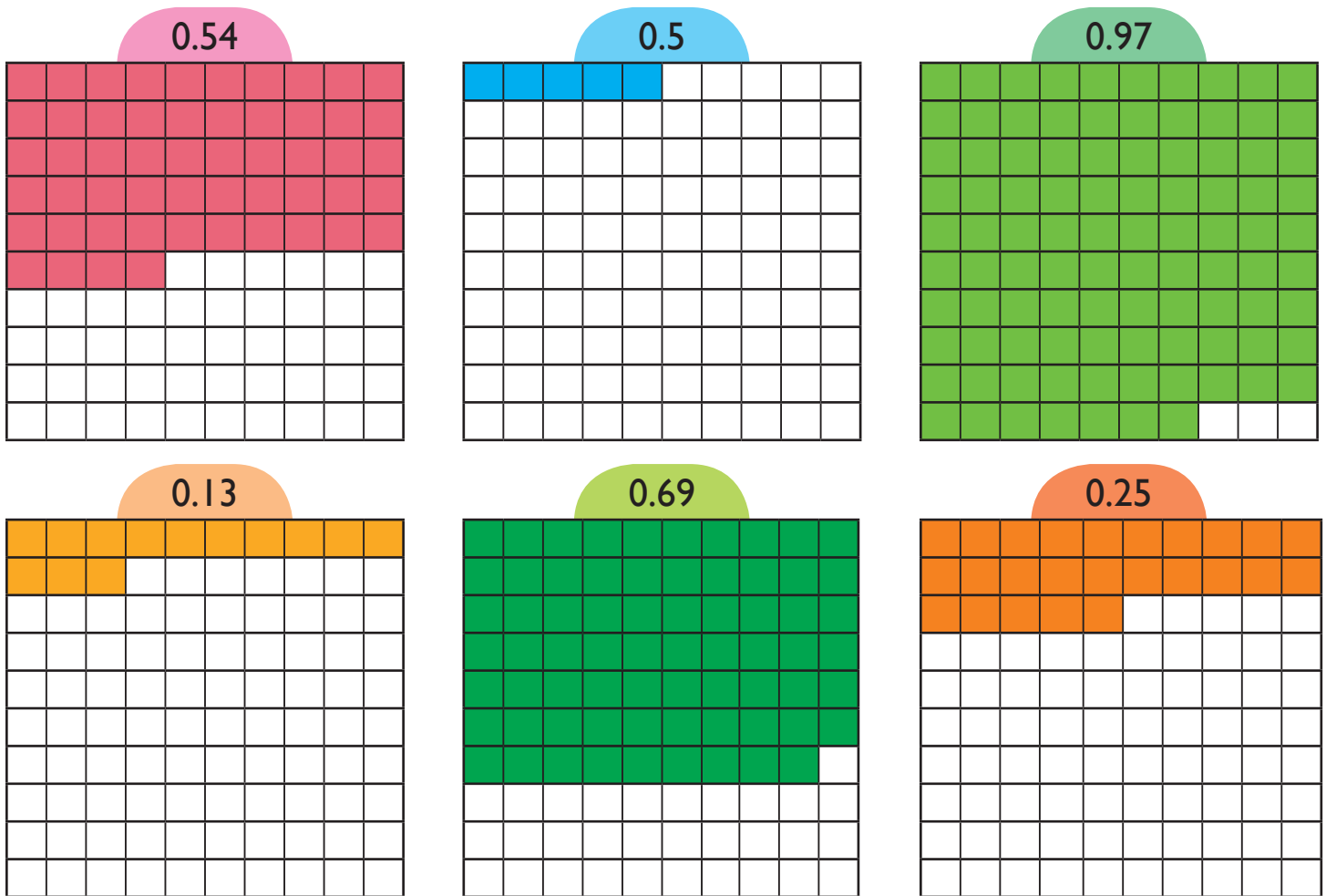
m) $126 \frac{45}{100}$ n) $\frac{123}{1000}$ o) $29 \frac{92}{1000}$ p) $9 \frac{9}{1000}$



Scan Your Brain

1. a) Fraction: $\frac{37}{100}$ Decimal: 0.37 b) Fraction: $\frac{17}{100}$ Decimal: 0.17
- c) Fraction: $\frac{25}{100}$ Decimal: 0.25 d) Fraction: $\frac{13}{100}$ Decimal: 0.13
- e) Fraction: $\frac{9}{100}$ Decimal: 0.09 f) Fraction: $\frac{56}{100}$ Decimal: 0.56

2.



3. a) 23.001 b) 1.406 c) 305.7 d) 2405.02 e) 99.706

4. a) 32.69 = _____ thousands + _____ hundreds + 3 tens
+ 2 ones + 6 tenths + 9 hundredths + _____ thousandths

b) 531.7 = _____ thousands + 5 hundreds + 3 tens
+ 1 ones + 7 tenths + _____ hundredths + _____ thousandths





- c) $238.809 =$ _____ thousands + 2 hundreds + 3 tens
+ 8 ones + 8 tenths + 0 hundredths + 9 thousandths
- d) $66.257 =$ _____ thousands + _____ hundreds + 6 tens
+ 6 ones + 2 tenths + 5 hundredths + 7 thousandths
- e) $187.005 =$ _____ thousands + 1 hundreds + 8 tens
+ 7 ones + 0 tenths + 0 hundredths + 5 thousandths
- f) $0.789 =$ _____ thousands + _____ hundreds + _____ tens
+ 0 ones + 7 tenths + 8 hundredths + 9 thousandths
- g) $9.025 =$ _____ thousands + _____ hundreds + _____ tens
+ 9 ones + 0 tenths + 2 hundredths + 5 thousandths
- h) $1001.005 =$ 1 thousands + 0 hundreds + 0 tens
+ 1 ones + 0 tenths + 0 hundredths + 5 thousandths
- i) $30.045 =$ _____ thousands + _____ hundreds + 3 tens
+ 0 ones + 0 tenths + 4 hundredths + 5 thousandths
- j) $1265.008 =$ 1 thousands + 2 hundreds + 6 tens
+ 5 ones + 0 tenths + 0 hundredths + 8 thousandths

9 Profit and Loss

Answers

Practice Time

1.

Profit
₹ 28.00
₹ 78.75
₹ 30.75
₹ 43.75
₹ 30.00
₹ 40.5
₹ 24.75

2.

Loss
₹ 34.00
₹ 21.75
₹ 34.75
₹ 40.75
₹ 15.00
₹ 120.25
₹ 26.00



3.

Selling Price
₹ 160.25
₹ 243.50
₹ 405.50
₹ 149.00
₹ 150.00
₹ 6171.00

Scan Your Brain

1. .

Cost Price	Selling Price	Profit	Loss
₹ 1240.00	₹ 1287.00	₹ 47.00	—
₹ 376.50	₹ 344.25	₹ 32.25	—
₹ 1358.00	₹ 1329.00	₹ 29.00	—
₹ 246.80	₹ 270.30	₹ 23.50	—
₹ 3312.00	₹ 3451.00	₹ 139.00	—
₹ 436.00	₹ 377.00	—	₹ 59.00
₹ 1567.00	₹ 1529.00	—	₹ 38.00

2. $SP = ₹ 13 \times 12 = ₹ 156$
 $P = SP - CP = ₹ 156 - ₹ 120$
 $= ₹ 36$

3. $SP = ₹ 5059$
 $L = ₹ 2579$
 $CP = SP + L$
 $= ₹ 5059 + ₹ 2579$
 $= ₹ 7638$





4. $SP = ₹ 2,30,000$
 $CP = ₹ 3,50,999$
 $L = CP - SP$
 $= ₹ 3,50,999 - ₹ 2,30,000$
 $= ₹ 1,20,999$

Hots Questions

1. $CP = ₹ 200 \times 20 = ₹ 400$
 $P = ₹ 1500$
 $SP = P + CP$
 $= ₹ 1500 + ₹ 4000$
 $= ₹ 5500$

2. $SP = ₹ 75 \times 50 = ₹ 3750$
 $CP = ₹ 1900$
 $P = SP - CP$
 $= ₹ 3750 - ₹ 1900$
 $= ₹ 1850$

10 Methods for Metric Measures

Answers

Practice Time

- | | | |
|-------------|------------|-----------|
| 1. a) 40 mm | b) 30 mm | c) 81 mm |
| d) 94 mm | e) 28 mm | f) 132 mm |
| g) 105 mm | h) 79 mm | i) 122 mm |
| j) 310 mm | k) 482 mm | l) 122 mm |
| m) 110 mm | n) 2354 mm | o) 160 mm |





2. a) 8.5 cm b) 9.2 cm c) 30 cm
d) 5.4 cm e) 27 cm f) 42.8 cm
g) 63.5 cm h) 31.2 cm i) 70.9 cm
j) 100 cm k) 300 cm l) 1200 cm
m) 1500 cm n) 1200 cm o) 10000 cm
3. a) 2 m 55 cm b) 3 m 4 cm c) 5 m 50 cm
d) 4 m e) 2m 50 cm f) 10 m
g) 1m 6 cm h) 7m 90 cm i) 9m 10 cm
j) 4m 16 cm k) 5m 100 cm l) 6 m
m) 7 m 7 cm n) 8m 12 cm o) 4m 44 cm
4. a) 1352 m b) 1045 m c) 1200 m
d) 3605 m e) 2101 m f) 7008 m
g) 5300 m h) 1445 m i) 1209 m
j) 2305 m k) 6007 m l) 1001 m
m) 1515 m n) 2005 m o) 2902 m
5. a) 3 km b) 4 km c) 8 km 100 m
d) 7 km 909 m e) 2 km 129 m f) 3 km 5 m
g) 1 km 10 m h) 2 km 500 m i) 13 km 246 m
j) 2 km 216 m k) 3 km 936 m l) 20 km 89 m
m) 1 km 203 m n) 7 km 7 m o) 15 km

Practice Time

1. a) 2045 mg b) 8024 mg c) 5198 mg
d) 3190 mg e) 4005 mg f) 1101 mg
g) 1325 mg h) 7008 mg i) 1010 mg
j) 1025 mg k) 3003 mg l) 5055 mg
m) 7025 mg n) 2000000 mg o) 4000000 mg
2. a) 6000 g b) 2000 g c) 7231 g
d) 5113 g e) 9009 g f) 1111 g





- g) 4010 g h) 6360 g i) 4501 g
j) 8016 g k) 8015 g l) 1010 g
m) 7000 g n) 4000 g o) 3333 g

3. a) 3g 125 mg b) 2g 865 mg c) 1g 76 mg
d) 2g 837mg e) 1g 991 mg f) 2g 930 mg
g) 92g 847 mg h) 3g 478 mg i) 22g 394 mg
j) 4g 834 mg k) 83g 274 mg l) 928g 392 mg
m) 10g 923 mg n) 2139g 128 mg o) 2g 182 mg

4. a) 9 kg 384 g b) 35 kg 498 g c) 4 kg 854 g
d) 23 kg 498 g e) 9 kg 283 g f) 2 kg 374 g
g) 3 kg 334 g h) 38 kg 748 g i) 19 kg 384 g
j) 10 kg 3 g k) 82 kg 700 g l) 40 kg
m) 200 kg 478 g n) 19 kg 200 g o) 7 kg 7 g

Practice Time

1. a) 7345 ml b) 1045 ml c) 2450 ml d) 8100 ml
e) 5050 ml f) 9354 ml g) 9090 ml h) 1010 ml
i) 6001 ml j) 7008 ml k) 5210 ml l) 1010 ml
m) 10100 ml n) 9900 ml o) 1111 ml

2. a) 9 l 282 ml b) 54 l 671 ml c) 3 l 473 ml d) 4 l 636 ml
e) 7 l 602 ml f) 30 l 445 ml g) 10 l 19 ml h) 55 l 5 ml
i) 1 l 9 ml j) 20 l 393 ml k) 29 l 3 ml l) 7 l 7ml
m) 4 l 200 ml n) 10 l 200 ml o) 62 l 532 ml

3. a) 7056 l b) 8056 l c) 3789 l d) 600 8 l
e) 20002 l f) 6003 l g) 2000 l h) 1919 l
i) 3030 l j) 5067 l

4. a) 3 kl 456 l b) 2 kl 6 l c) 3 kl 90 l d) 2 kl 300 l
e) 1 kl 1 l f) 1 kl 10 l g) 34 kl 520 l h) 10 kl 5 l
i) 302 kl 10 l f) 7 kl 81 l

Practice Time

I.

<table border="1"><tr><th>m</th><th>mm</th></tr><tr><td>3</td><td>107</td></tr><tr><td>+</td><td>4</td></tr><tr><td></td><td>293</td></tr><tr><td></td><td>7</td></tr><tr><td></td><td>400</td></tr></table>	m	mm	3	107	+	4		293		7		400	<table border="1"><tr><th>m</th><th>mm</th></tr><tr><td>8</td><td>117</td></tr><tr><td>+</td><td>7</td></tr><tr><td></td><td>216</td></tr><tr><td></td><td>15</td></tr><tr><td></td><td>333</td></tr></table>	m	mm	8	117	+	7		216		15		333	<table border="1"><tr><th>m</th><th>mm</th></tr><tr><td>12</td><td>235</td></tr><tr><td>+</td><td>15</td></tr><tr><td></td><td>314</td></tr><tr><td></td><td>27</td></tr><tr><td></td><td>549</td></tr></table>	m	mm	12	235	+	15		314		27		549	<table border="1"><tr><th>m</th><th>cm</th></tr><tr><td>5</td><td>72</td></tr><tr><td>+</td><td>6</td></tr><tr><td></td><td>93</td></tr><tr><td></td><td>12</td></tr><tr><td></td><td>65</td></tr></table>	m	cm	5	72	+	6		93		12		65
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2. a) 5 m 7 cm
 c) 4 l 275 ml
 e) 3 kg 760 g
 g) 2 l 655 ml

- b) 3 dm 4 cm
 d) 2 kl 692 l
 f) 73 kg 655 g
 h) 3 km 765 m

3. a) 36 dm
 c) 84 kg 238 g
 e) 388 l 556 ml

- b) 112 m 8 cm
 d) 9 l 155 ml
 f) 275 kg 776 g

4. a) 1 m 12 cm
 c) 5 l 11 ml
 e) 1 l 51 ml

- b) 4 m 6 cm
 d) 1 kg 129 g
 f) 1 l 120 mg



Scan Your Brain

1. a) $5 \text{ m} = 500 \text{ cm}$ b) $1000 \text{ mm} = 100 \text{ cm}$
 c) $8 \text{ km} = 8000 \text{ m}$ d) $7 \text{ km} = 7000 \text{ m}$
 e) $6 \text{ kg} = 6000 \text{ g}$ f) $3 \text{ kl} = 3000 \text{ l}$
 g) $5,000 \text{ g} = 5 \text{ kg}$ h) $60 \text{ mm} = 6 \text{ cm}$
 i) $1200 \text{ ml} = 1 \text{ l } 200 \text{ ml}$ j) $1 \text{ kl} = 1000 \text{ l}$
 k) $1 \text{ km} = 100000 \text{ cm}$ l) $1 \text{ cm} = 10 \text{ mm}$
 m) $8,000 \text{ ml} = 8 \text{ l}$ n) $1,000 \text{ ml} = 1 \text{ l}$
 o) $10,000 \text{ m} = 10 \text{ km}$ p) $50 \text{ mg} = 5 \text{ cg}$
 q) $6 \text{ g} = 6000 \text{ mg}$ r) $7 \text{ g} = 700 \text{ cg}$
 s) $7 \text{ l} = 700 \text{ cl}$ t) $900 \text{ cm} = 9 \text{ m}$

2. a) $405 \text{ l } 500 \text{ ml} + 712 \text{ l } 234 \text{ ml}$
 $+ 863 \text{ l } 12 \text{ ml} = 1980 \text{ l } 746 \text{ ml}$
 b) $182 \text{ m } 96 \text{ cm} \div 5$
 $= 36 \text{ m } 59 \text{ cm}$
 Left over = 1 cm
 c) $22 \text{ kg } 780 \text{ g} \times 15$
 $= 341 \text{ kg } 700 \text{ g}$

Hots Questions

1. $25 \text{ kg } 964 \text{ g} \div \frac{1}{2} = 12 \text{ kg } 982 \text{ g}$
 2. $22 \text{ l } 500 \text{ ml} \div 750 = 300 \text{ mugs}$

II Money

Answers

Practice Time

1. a) 745 p b) 802 p c) 2392 p d) 3005 p e) 37226 p





f) 26204 p g) 881 p h) 6662 p i) 3478 p j) 10250 p

2.

225 p	₹ 2 25 p	₹ 2.25
756 p	₹ 7 56 p	₹ 7.56
1004 p	₹ 10 4 p	₹ 10.04
2341 p	₹ 23 41 p	₹ 23.41
3509 p	₹ 35 9 p	₹ 35.09
2002 p	₹ 20 2 p	₹ 20.02
4040 p	₹ 40 40 p	₹ 40.40
70198 p	₹ 701 98 p	₹ 701.98
20002 p	₹ 200 2 p	₹ 200.02
13905 p	₹ 139 5 p	₹ 139.05

Practice Time

1. a) ₹ 83 90 p b) ₹ 92 80 p c) ₹ 58 10 p d) ₹ 108 20 p
 e) ₹ 61 80 p f) ₹ 92 05 p g) ₹ 99 95 p h) ₹ 113 90 p
 i) ₹ 100 j) ₹ 49 20 p k) ₹ 392 70 p l) ₹ 801
 m) ₹ 91 15 p n) ₹ 342 70 p o) ₹ 302 90 p
2. a) ₹ 2 b) ₹ 35 15 p c) ₹ 35 80 p d) ₹ 19 70 p
 e) ₹ 45 60 p f) ₹ 79 05 p g) ₹ 38 95 p h) ₹ 54 15 p
 i) ₹ 182 55 p j) ₹ 64 85 p k) ₹ 36 35 p l) ₹ 64 85 p
 m) ₹ 23 75 p n) ₹ 264 05 p o) ₹ 183 85 p

Scan Your Brain

1. a) ₹ 9.54 b) ₹ 28.05 c) ₹ 14.32 d) ₹ 37.08
 e) ₹ 60.90 f) ₹ 80.11 g) ₹ 96.04 h) ₹ 50.50
 i) ₹ 16.12 j) ₹ 49.34
2. a) ₹ 30 b) ₹ 60 c) ₹ 212 d) ₹ 808
 e) ₹ 2650 f) ₹ 2253





Hots Questions

For the case of no balance left, we can purchase items of value:

- i) ₹ 100 (Donuts)
- ii) ₹ 50 (Sandwich)
- iii) ₹ 150 (Pizza)
- (iv) ₹ 125 (Hot Dog)
- v) ₹ $25 \times 3 = ₹ 75$ (Burger)

For the case of ₹ 100 balance to be left, we can purchase

- i) ₹ 100 (Donuts)
- ii) ₹ 50 (Sandwich)
- iii) ₹ 150 (Pizza)
- iv) ₹ $25 \times 4 = ₹ 100$ (Burger)

12 Time

Answers

Practice Time

1.

4 : 27 27 minutes past 4	2 : 28 28 minutes past 2	3 : 13 13 minutes past 3	4 : 39 39 minutes past 4
6 : 02 2 minutes past 6	11 : 02 2 minutes past 11	12 : 07 7 minutes past 12	8 : 16 16 minutes past 8
5 : 22 22 minutes past 5	7 : 23 23 minutes past 7	1 : 43 43 minutes past 1	9 : 55 55 minutes past 9

2.

3 : 56 : 19 56 minutes 19 seconds past 3	2 : 18 : 58 18 minutes 58 seconds past 2	7 : 37 : 08 37 minutes 8 seconds past 7
--	--	---





8 : 49 : 23

49 minutes 23
seconds past 8

11 : 00 : 45

45 seconds
past 11

10 : 22 : 28

22 minutes 28
seconds past 10

Practice Time

1. a) 1920 min b) 1740 min c) 900 min
d) 4471 min e) 2573 min f) 2306 min
g) 5143 min h) 2304 min i) 3853 min
2. a) 1080 sec b) 1380 sec c) 2243 sec
d) 1334 sec e) 58980 sec f) 54120 sec
g) 2,992,334 sec h) 68,892 sec i) 77,527 sec
3. a) 216 hrs b) 672 hrs c) 768 hrs
d) 215 hrs e) 292 hrs f) 537 hrs
4. a) 4 hrs 9 min b) 9 hrs 23 min c) 5 hrs 26 min
d) 4 hrs 56 min e) 15 hrs 38 min f) 11 hrs 24 min
g) 12 hrs 12 min h) 18 hrs 13 min i) 13 hrs 30 min
5. a) 6 min 9 sec b) 47 min 53 sec c) 7 min 8 sec
d) 8 min 54 sec e) 80 min f) 88 min 44 sec
g) 18 min 12 sec h) 60 min 9 sec
6. a) 2 days 4 hrs b) 3 days 7 hrs c) 5 days
d) 7 days 2 hrs e) 4 days 2 hrs f) 10 days
g) 13 days 8 hrs h) 37 days 12 hrs
7. a) 144 months b) 45 months c) 300 months
d) 163 months e) 648 months f) 137 months
8. a) 30 years 4 months b) 19 years c) 10 years
d) 5 years 3 months e) 7 years f) 11 years





Scan Your Brain

- 1.
- | | | |
|--|--|--|
| 9:29:42
29 minutes
42 seconds past 9 | 3:32:12
32 minutes
12 seconds past 3 | 7:28:17
28 minutes
17 seconds past 7 |
| 5:36:23
36 minutes
23 seconds past 5 | 12:00:17
17 seconds
past 12 | |

- 2.
- | | |
|-----------------|------------------|
| a) 8 min 47 sec | b) 45 min 28 sec |
| c) 31.31 hours | d) 405 min |
| e) 59,100 sec | f) 264 months |

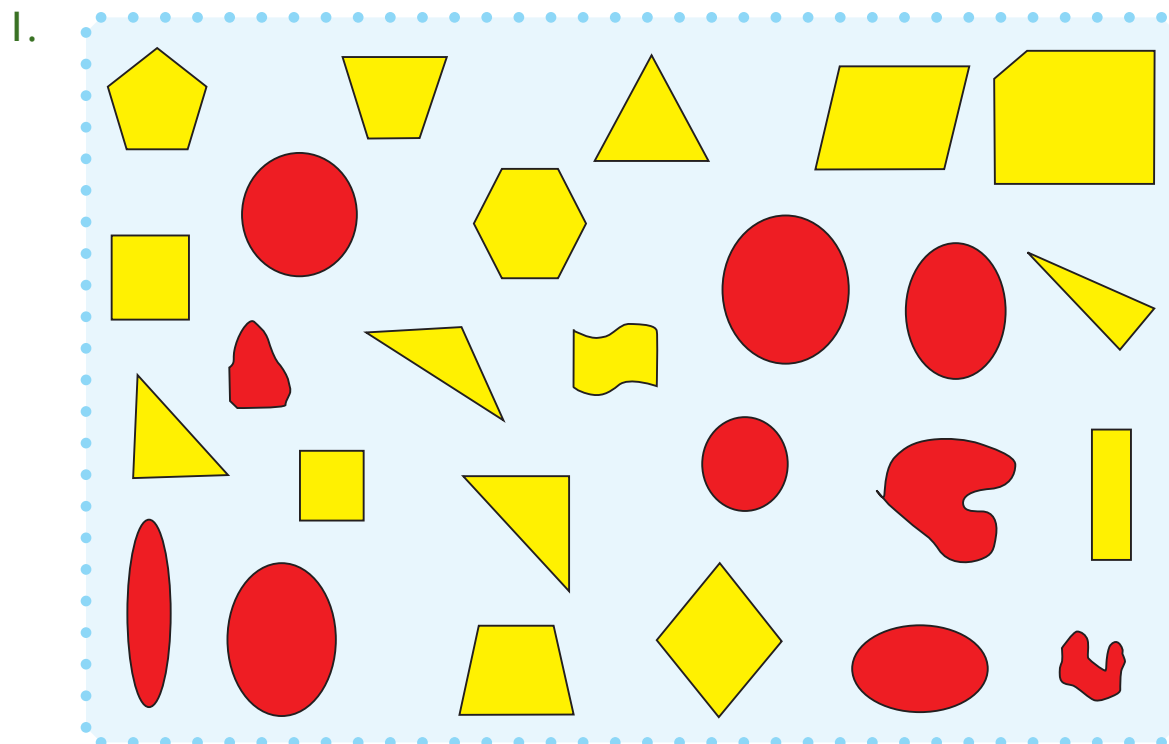
Hots Questions

1. a) 2 hrs 48 min 15 sec b) 3 hrs 42 min 12 sec

13 Circles

Answers

Practice Time





2. a) circle b) circumference c) chord
 d) a part e) Diameter f) Radius

3. Centre O
 Radius OR, OS,
 OP, OQ
 Diameter RQ, PS

Centre C
 Radius CB, CD,
 CA
 Diameter AD

Centre O
 Radius OR, OQ,
 OP
 Diameter PS

Centre C
 Radius CA, CB,
 CD, CE
 Diameter BE

Centre A
 Radius AC, AB,
 AD
 Diameter CD

Practice Time

1. a) 4 cm b) 3 cm c) 5 cm
 d) 5.5 cm e) 4.6 cm f) 0.8 cm
2. a) 6 cm b) 8 cm c) 16 cm
 d) 4 cm e) 11 cm f) 12.2 cm

3. Do it Yourself

Scan Your Brain

1. Radii: OD, OA, OB
 Centre: O
 Diameter: AB
 Chord: AB, BD
 Arc: BRD, DQA, BPA, BRA

Do it Yourself





Hots Questions

4 circles are present in the design given below. Yes, they all have same radii.

14 Perimeter of Squares and Rectangles

Answers

Practice Time

1.

Side of square	4 cm	13 cm	18 m	29 m	32 m	43 dm	54 m	17 km	85 km
Perimeter = 4 x side	13 cm	52 cm	72 m	116 m	128 m	172 dm	216 m	68 km	340 km

2.

Length	5 cm	9.8 cm	15 m	19.7 m	38.5 m	54 dm	60 m	3.2 km	9 km
Breadth	2 cm	5.2 cm	9 m	8.3 m	22.5 cm	18 dm	30 m	1.8 km	5 km
Perimeter = 2 x (l + b)	14 cm	30 cm	48 m	56 m	61 cm	72 dm	180 m	10 km	28 km

3. a) 24 units


b) 32 units

c) 15 units

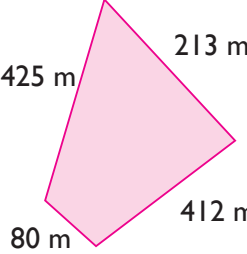
d) 23 units

Scan Your Brain

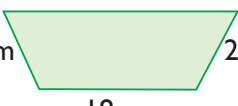
1.



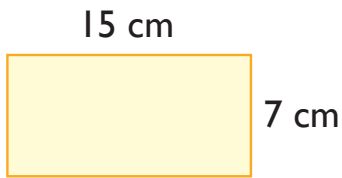
 $(4 + 4 + 4 + 4) \text{ cm}$
 $= 16 \text{ cm}$



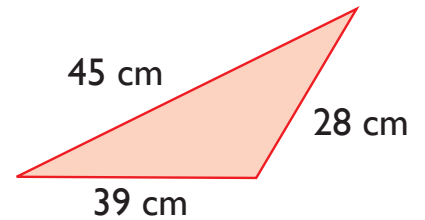
 $(425 + 213 + 412 + 80) \text{ m}$
 $= 1130 \text{ m}$



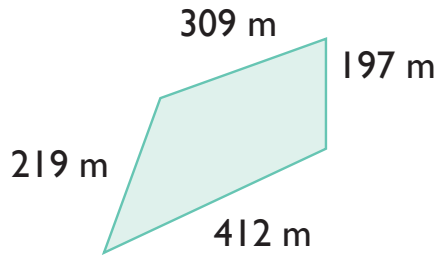
 $(54 + 20 + 18 + 20) \text{ cm}$
 $= 112 \text{ cm}$



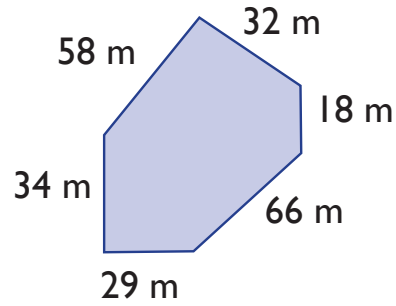
$$(15 + 7 + 15 + 7) \text{ cm} = 44 \text{ cm}$$



$$(45 + 28 + 39) \text{ cm} = 112 \text{ cm}$$

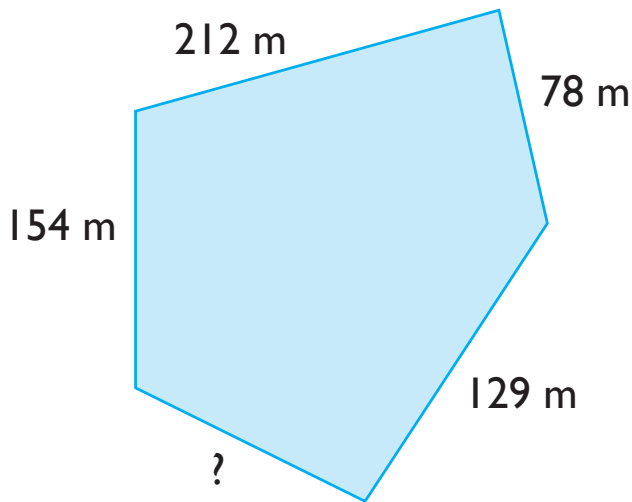


$$(412 + 219 + 309 + 197) \text{ m} = 1137 \text{ m}$$

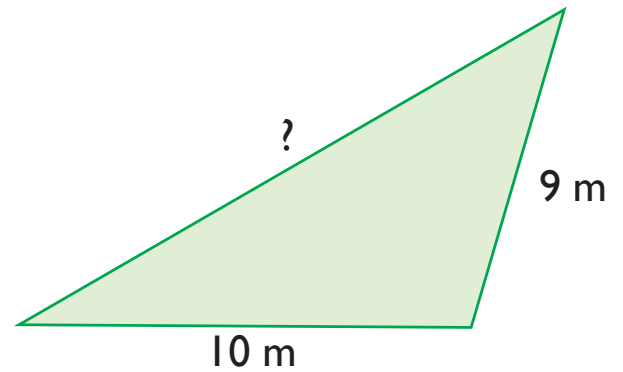


$$(29 + 34 + 58 + 32 + 18 + 66) \text{ m} = 237 \text{ m}$$

2.



$$\begin{aligned} \text{Perimeter} &= 672 \text{ m} \\ ? &= 672 - (212 + 78 + 129 + 154) \\ ? &= 672 - 573 = 99 \text{ m} \end{aligned}$$



$$\begin{aligned} \text{Perimeter} &= 34 \text{ m} \\ ? &= 34 - (10 + 9) \\ ? &= 34 - 19 = 15 \text{ m} \end{aligned}$$





15 Data Handling

Answers

Practice Time

1. a) 5 children
b) $3 + 2 + 1 = 6$ children
c) Marks obtained in Maths test
d) 6
e) $3 + 2 + 1 + 5 + 9 + 11 + 9 + 7 + 9 + 5 = 61$ students
f) 3
g) 1
h) 1 student
2. a) Yellow b) 30 c) 27 d) 24
e) 6 teams f) Green g) 8 h) 15
3. a) 3 People b) Dog c) Cat
d) $3(\text{Parrot}) - 1(\text{Hamster}) = 2$ e) $14 + 10 = 24$ f) Dog
g) Hamster h) 7 People i) $5(\text{Horse}) - 4(\text{Turtle}) = 1$
4. a) 35 b) Orange c) Vanilla





d) $40(\text{Strawberry}) - 30(\text{Cherry}) = 10$

e) $50(\text{Orange}) + 25(\text{Watermelon}) = 75$

f) Orange g) Vanilla h) $30 - 25 = 5$ i) $40 - 30 = 10$

j) Vanilla k) $25 + 45 + 15 + 35 + 40 + 30 + 50 = 240$ Candies

Practice Time

1. Items sold in a stationery shop in a day

a) Notebooks

b) Pens

c) $\frac{2}{10}$

d) $30 + 45 = 75$

e) Notebooks & Erasers

2. a) Spiderman

b) Batman, Superman

c) Hulk, Iron man

d) $\frac{4}{10}$

e) $\frac{4}{10} + \frac{2}{10} = \frac{6}{10} = \frac{3}{5}$

f) Spiderman, Superman

