

Answers

Target p62-65

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A

- 1 a) $\frac{1}{4}$
b) 0.25
c) 25%
- 2 a) $\frac{59}{100}$
b) 0.59
c) 59%
- 7 a) $\frac{82}{100}$
b) 0.82
c) 82%
- 8 a) $\frac{2}{5}$
b) 0.4
c) 40%
- 3 a) $\frac{7}{10}$
b) 0.7
c) 70%
- 4 a) $\frac{24}{100}$
b) 0.24
c) 24%
- 9 a) $\frac{7}{100}$
b) 0.07
c) 7%
- 10 a) $\frac{3}{4}$
b) 0.75
c) 75%
- 5 a) $\frac{1}{2}$
b) 0.5
c) 50%
- 6 a) $\frac{1}{10}$
b) 0.1
c) 10%
- 11 a) 25%
b) 10%
c) 20%
- 12 40%

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B

1	Fractions	Decimals	Percentages
	$\frac{1}{10}$	0.1	10%
	$\frac{1}{2}$	0.5	50%
	$\frac{32}{100}$	0.32	32%
	$\frac{9}{10}$	0.9	90%
	$\frac{18}{100}$	0.18	18%
	$\frac{1}{4}$	0.25	25%
	$\frac{2}{100}$	0.02	2%
	$\frac{2}{5}$	0.4	40%
	$\frac{7}{50}$	0.14	14%
	$\frac{3}{4}$	0.75	75%
	$\frac{6}{100}$	0.06	6%
	$\frac{11}{25}$	0.44	44%
	$\frac{1}{100}$	0.01	1%
	$\frac{19}{20}$	0.95	95%

- 2 50%
3 95%
4 80%
- 5 29%
6 100%
7 75%
- 8 54%
9 36%
10 60%

C

- 1 a) 0.7
2 a) 0.08
3 a) 0.87
4 a) 0.15
5 a) 0.4
6 a) 0.63
7 a) 0.92
8 a) 0.45
- b) 70%
b) 8%
b) 87%
b) 15%
b) 40%
b) 63%
b) 92%
b) 45%
- 9 a) $\frac{23}{100}$
10 a) $\frac{7}{20}$
11 a) $\frac{3}{5}$
12 a) $\frac{9}{100}$
13 a) $\frac{21}{100}$
14 a) $\frac{1}{200}$
15 a) $\frac{3}{10}$
16 a) $\frac{7}{40}$
- b) 0.23
b) 0.35
b) 0.6
b) 0.09
b) 0.71
b) 0.005
b) 0.3
b) 0.175

13

17

Name	Cakes made	Cakes sold	% age sold	% age unsold
Ailsa	50	39	78%	22%
Bilal	54	27	50%	50%
Carmen	40	28	70%	30%
Digby	60	39	65%	35%
Esmé	45	36	80%	20%
Fred	56	42	75%	25%
Gail	48	30	62.5%	37.5%
Harry	55	33	60%	40%

- 18 a) 15 boxes
b) 12 boxes
d) 40%

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A

- 1 9°
2 4.5
3 0.7
4 $2\frac{1}{3}$
- 5 88
6 30
7 9.5
8 1.4
- 9 6
10 $\frac{5}{2}$
11 12
12 0.25
- 13 $6\frac{3}{8}$
14 0.5
15 2.5
16 7.7

B

- 1 2.3
2 $1\frac{8}{10}$
3 £7.50
4 1.35
- 5 45°
6 0.64
7 20
8 0.058
- 9 0.94
10 50p
11 77
12 21
- 13 $\frac{9}{20}$
14 £17.10
15 1.6
16 £31.50

C

- 1 £13.75
2 0.9
3 0.065
4 $1\frac{7}{8}$
- 5 £264
6 0.482
7 2
8 55
- 9 6.94
10 £189
11 1.589
12 0.025
- 13 1.6
14 324°
15 0.685
16 0.28

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A

- 1 3
2 8
3 5
4 10
5 15
6 20
7 42
- 8 50
9 4p
10 7p
11 10p
12 18p
13 20p
14 46p
- 15 £1.20
16 9p
17 2cm
18 6cm
19 40g
20 100g
21 10cm
- 22 50cm
23 100g
24 300g
25 24
26 £405

B

- 1 a) 20p
2 a) 50ml
3 a) 300g
4 a) 1.5m
- b) 10p
b) 25ml
b) 150g
b) 0.75m
- c) 40p
c) 100ml
c) 600g
c) 3m
- 5 60
6 175
7 180
8 15
- 9 25g
10 100g
11 19ml
12 400ml
- 13 1.5 litres
14 112
15 £26.25

C

- 1 £2.40
2 32p
3 8.5cm
4 30cm
- 5 55g
6 600g
7 9.9 litres
8 570ml
- 9 250
10 35
11 20
12 52
- 13 140
14 40
15 240
16 480
- 17 a) £15 150
b) £15 750
c) £16 125

14

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A

1 6	6 16	11 3	16 8
2 7	7 6	12 15	17 60
3 4	8 12	13 8	18 18
4 9	9 30	14 10p	19 15
5 5	10 16	15 50 cm	20 6

B

1 24	5 18	9 26	13 5
2 14	6 35	10 360	14 32
3 80	7 18	11 100	15 22
4 40	8 42	12 1.1	16 2nd screening had 13 more

C

1 150	5 48	9 125	13 2923
2 150	6 980	10 2.8	14 6600
3 1.8	7 6	11 570	15 180
4 350	8 42	12 105	16 10822

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A

1 7	6 12	11 5	16 8
2 8	7 27	12 12	17 21
3 6p	8 25 cm	13 20p	18 17 cm
4 5 mm	9 14 g	14 32p	19 8 km
5 8 kg	10 £9	15 10 cm	20 5p

B

1 400 g	6 90 km	11 30 kg	16 0.5 g
2 45 cm	7 £10	12 4p	17 18 kg
3 350 ml	8 45 m	13 324 ml	18 £108
4 48p	9 £75	14 120 km	19 3 litres
5 36 kg	10 7.5 m	15 33 cm	20 31.5 km

C

1 £4.80	6 104	11 90 g	16 £67.32
2 330 g	7 360 m	12 33p	17 £25.60
3 £70	8 350 ml	13 31.5 cm	
4 180 g	9 5 g	14 18p	
5 36 cm	10 4.5 m	15 £2.85	
18 gravel	2.64 kg	19 250 litres	20 £860
sand	1.44 kg		
cement	720 g		

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A

1 2.5

Page

A

1 a
b
2 a
b

Page

B

1 48
2 24
3 35
4 24
5 18
6 14
7 30

C

1 42
2 36
3 40
4 a)
5 a)
6 9 l
7 30

Page 7

A

1 a)
b)
2 a)
b)
3 Rex

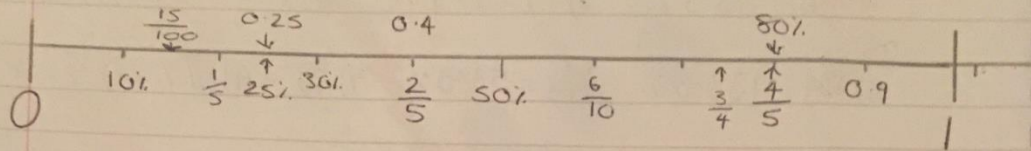
Rov

4 a)
b)
8 a)

b)

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Abacus 6 p 47 Answers.



Order from smallest to largest =

10%, $\frac{15}{100}$, $\frac{1}{5}$, ~~0.25~~ and 25%, 30%, ~~0.4~~ $\frac{2}{5}$, 50%, $\frac{6}{10}$, $\frac{3}{4}$, $\frac{4}{5}$ and 80%,

15) $40\% = \frac{40}{100} = \frac{4}{10} = \frac{2}{5}$

As a decimal:
0.4 or 0.40

16) $30\% = \frac{30}{100} = \frac{3}{10}$

0.3 or 0.30

17) $20\% = \frac{20}{100} = \frac{2}{10} = \frac{1}{5}$

0.2 or 0.20

18) $5\% = \frac{5}{100} = \frac{1}{20}$

0.05

19) $10\% = \frac{10}{100} = \frac{1}{10}$

0.1 or 0.10

20) $80\% = \frac{80}{100} = \frac{8}{10} = \frac{4}{5}$

0.8 or 0.80

21) $75\% = \frac{75}{100} = \frac{3}{4}$

0.75

22) $2\% = \frac{2}{100} = \frac{1}{50}$

0.02

23) $35\% = \frac{35}{100} = \frac{7}{20}$

0.35

24) $45\% = \frac{45}{100} = \frac{9}{20}$

0.45

25) $7\% = \frac{7}{100} =$

0.07

26) $60\% = \frac{60}{100} = \frac{6}{10} = \frac{3}{5}$

0.6 or 0.60

Abacus 6 p 48 Answers

1) $25\% = \frac{1}{4}$ 2) $0.3 = \frac{3}{10}$ 3) $\frac{12}{100} = 12\%$ 4) $\frac{73}{100} = 0.73$

5) $\frac{2}{5} = \frac{2}{10} = 20\%$ 6) $54\% = \frac{54}{100}$ 7) $\frac{14}{100} = 0.14$ 8) $\frac{1}{5} = 20\%$

9) $0.18 = \frac{18}{100}$ 10) $50\% = \frac{5}{10}$

11) $75\% > 0.68$ 12) $0.71 > \frac{17}{100}$ 13) $0.36 = \frac{36}{100}$

14) $85\% = 0.85$ 15) $\frac{27}{100} < 30\%$ 16) $55\% > \frac{44}{100}$

17) $31\% > 0.13$ 18) $21\% = \frac{21}{100}$ 19) $0.43 < \frac{44}{100}$

20) $8\% < \frac{80}{100}$

21) 0.27 $\frac{35}{100}$ 50%

22) $\frac{10}{100}$ 71% 0.75

23) 0.33 34% $\frac{43}{100}$

24) 8% 0.18 $\frac{81}{100}$

25) 0.9 91% $\frac{99}{100}$

26) 2% $\frac{2}{10}$ 0.21

27) 0.2 25% $\frac{3}{10}$

Abacus 6 p49 Answers

1) $\frac{3}{4} = 0.75$ 2) $\frac{2}{5} = 0.4$ 3) $\frac{1}{8} = 0.125$ 4) $\frac{3}{8} = 0.375$

5) $\frac{7}{20} = 0.35$ 6) $\frac{4}{5} = 0.8$ 7) $\frac{1}{5} = 0.2$ 8) $\frac{5}{8} = 0.625$

9) $\frac{7}{8} = 0.875$ 10) $\frac{6}{15} = 0.4$ 11) $\frac{9}{25} = 0.36$

12) $\frac{3}{8} = 0.375$ 13) $\frac{3}{5} = 0.6$ 14) $\frac{1}{4} = 0.25$

$\frac{4}{10} = 0.4$ $\frac{17}{20} = 0.85$ $\frac{5}{16} = 0.3125$

$\frac{3}{8} < \frac{4}{10}$ $\frac{3}{5} < \frac{17}{20}$ $\frac{1}{4} < \frac{5}{16}$

15) $\frac{2}{7} = 0.28...$ 16) $\frac{37}{50} = 0.74$ 17) $\frac{6}{7} = 0.85...$

$\frac{30}{100} = 0.3$ $\frac{2}{3} = 0.66...$ $\frac{21}{25} = 0.84$

$\frac{2}{7} < \frac{30}{100}$ $\frac{2}{3} < \frac{37}{50}$ $\frac{6}{7} > \frac{21}{25}$

18) $\frac{4}{9} = 0.44...$

$\frac{5}{12} = 0.42...$

$\frac{4}{9} > \frac{5}{12}$

19) $\frac{1}{3} = 20 \text{ cm}$

60% of 20 = 12

There are 20 children

There are 8 boys.

21) $\frac{1}{6}$ of 30 = 5 20% of 30 = 6

5 + 6 = 11 30 - 11 = 19

They use 19 matches

20) $\frac{3}{8}$ of 72 = 27 red 25% of 72 = 18 blue

$\frac{1}{3}$ of 72 = 24 green

27 + 18 + 24 = 69 72 - 69 = 3

There are 3 silver marbles

22) $\frac{1}{5}$ of £35 = £5 for m/shake

40% of £35 = £14 for ice cream

£5 + £14 = £19 £35 - £19 = £16

The burgers cost £16

Abacus 7 p47 Answers

- 1) $\frac{7}{10} = 70\%$ 2) $\frac{1}{4} = 25\%$ 3) $1\frac{3}{4} = 175\%$
 4) $2\frac{1}{2} = 250\%$ 5) $\frac{13}{100} = 13\%$ 6) $\frac{3}{8} = 37.5\%$
 7) $75\% = \frac{3}{4}$ 8) $60\% = \frac{3}{5}$ 9) $150\% = 1\frac{1}{2}$
 10) $225\% = 2\frac{1}{4}$ 11) $87\% = \frac{87}{100}$ 12) $12.5\% = \frac{1}{8}$
 13) $\frac{3}{5} = \frac{60}{100} = 60\%$ 14) $\frac{7}{20} = \frac{35}{100} = 35\%$ 15) $\frac{13}{50} = \frac{26}{100} = 26\%$
 16) $\frac{27}{50} = \frac{54}{100} = 54\%$ 17) $\frac{17}{25} = \frac{68}{100} = 68\%$ 18) $\frac{34}{25} = \frac{136}{100} = 136\%$
 19) $\frac{3}{5} = 60\%$
 $\frac{4}{10} = 40\%$
 $\frac{11}{20} = 55\%$
 $\frac{1}{2} = 50\%$
 $\frac{3}{4} = 75\%$
 order = BDCAE
 20) $\frac{17}{25} = 68\%$
 $\frac{35}{100} = 35\%$
 $\frac{1}{4} = 25\%$
 $\frac{3}{2} = 150\%$
 $\frac{7}{10} = 70\%$
 order = CBAED
 21) $\frac{68}{200} = 34\%$
 $\frac{7}{10} = 70\%$
 $\frac{37}{50} = 74\%$
 $\frac{13}{20} = 65\%$
 $\frac{3}{5} = 60\%$
 order = AEDBC
 22) $\frac{6}{25} = 24\%$
 $\frac{5}{2} = 250\%$
 $\frac{3}{10} = 30\%$
 $\frac{7}{20} = 35\%$
 $\frac{69}{300} = 23\%$
 order = EACDB
 23) $10\% = \frac{1}{10}$
 24) $25\% = \frac{1}{4}$
 25) $60\% = \frac{3}{5}$
 26) $5\% = \frac{1}{20}$
 27) $65\% = \frac{13}{20}$
 28) $80\% = \frac{4}{5}$
 29) $4\% = \frac{1}{25}$
 30) $120\% = 1\frac{1}{5}$
 31) $135\% = 1\frac{7}{20}$
 32) $72\% = \frac{18}{25}$
 33) $86\% = \frac{43}{50}$
 34) $64\% = \frac{16}{25}$
 35) $35\% = \frac{7}{20}$
 36) $18\% = \frac{9}{50}$
 37) $7\% = \frac{7}{100}$
 38) $12.5\% = \frac{1}{8}$

Abacus 7 p48 Answers

- 1) $\frac{5}{6} = 83.3\%$ 2) $\frac{4}{7} = 57.1\%$ 3) $\frac{7}{9} = 77.8\%$ 4) $\frac{3}{11} = 27.27\%$
- 5) $\frac{4}{3} = 133.3\%$ 6) $\frac{8}{15} = 53.3\%$ 7) $\frac{5}{12} = 41.7\%$ 8) $\frac{7}{8} = 87.5\%$
- 9) $\frac{11}{18} = 61.1\%$ 10) $\frac{6}{13} = 46.1\%$
- 11) black = 50% 12) red = 50% 13) spades = 25%
- 14) diamonds = 25% 15) clubs = 12.5% 16) more than 4 = 50%
- 17) odd = 62.5% 18) not hearts = 62.5% 19) red = 16.7%
- 20) diamonds = 16.7% 21) clubs = 33.3% 22) black = 83.3%
- 23) hearts = 0% 24) even = 50% 25) ~~50%~~ black = 50%
- 26) red = 50% 27) hearts = 25% 28) clubs = 25%
- 29) more than 5 = 58.3% 30) less than 5 = 25%
- 31) $\frac{3}{4} > 0.72$ 32) $0.81 > \frac{4}{5}$ 33) $\frac{7}{20} > 34\%$
- 34) $45\% > \frac{11}{25}$ 35) $\frac{3}{7} < 43\%$ 36) $45\% > \frac{5}{12}$
- 37) $\frac{5}{6} > 0.8$ 38) $\frac{7}{8} > 0.82$ 39) $\frac{4}{7} < \frac{6}{9}$
- 40) $\frac{4}{7}$ failed = 57.1%
- 41) 28% have not = $\frac{28}{100} = \frac{7}{25}$
- 42) $\frac{5}{12} + \frac{2}{7} + \frac{2}{9}$
 $41.7 + 28.6 + 22.2 = 92.5\%$
 $= 7.5\%$ voted autumn.
- 43) $\frac{4}{5}$ adults = male $\frac{1}{5}$ adults
40% = chr 60% = adults = female
 $\frac{1}{5}$ of 60% = 12%