Big Maths Beat That!: Teacher Notes

SAFE Challenge 15			
	Step Location in the SAFE framework		Title of Step
	Progress Drive	Step No.	
Q1	Shape: 2D Shapes	23	I can sort polygons by side number and identify specific triangles and quadrilaterals
Q2	Amounts: Amounts of Space	20	I can convert litres to millilitres
Q3	Amounts: Amounts of Time	25	I can calculate time gaps within an hour (5 min)
Q4	Amounts: Amounts of Time	26	I can calculate time gaps across an hour (5 min)
Q5	Amounts: Amounts of Time	27	I can calculate time gaps across several hours (5 min)
Q6	Fractions: Fractions of a Set	12	I use all tables Learn Its to find fractions of amounts
Q7	Fractions: Fractions: Counting	13	I can count in fifths
Q8	Fractions: Fractions: Counting	16	I can record my hundredths with decimals too
Q9	Fractions: Fractions: Learn Its	7	I know 1/2 = 0.5, 1/10 = 0.1, 1/4 = 0.25 3/4 = 0.75, 1/100=0.01
Q10	Fractions: Fractions: It's Nothing New	7	I can multiply unit fractions (beyond 1)

NAME: CLASS: DATE:

SAFE 15 | WK: 1 | /10

1

Which of these statements are true?:

6 sides ☐

Is a trapezium ☐

All internal angles are the same ☐

All internal angles are different ☐

2

4 L = _____ ml

$4\frac{1}{2}$ L = _____ ml

4.5 L = _____ ml

3 How long from?

04:05 to 04:40

4 How long from?

03:40 to 04:25

5 How long from?

03:20

to

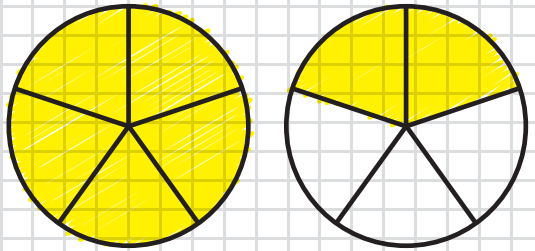
06:35

6

$\frac{1}{9}$ of 63 =

$\frac{4}{9}$ of 63 =

7



Mixed number → _____

Improper fraction → _____

8

0.47 as a proper fraction =

$\frac{38}{100}$ as a decimal =

9 Write these fractions as decimal equivalents

$\frac{1}{2}$ = $\frac{1}{10}$ = $\frac{1}{4}$ =

10

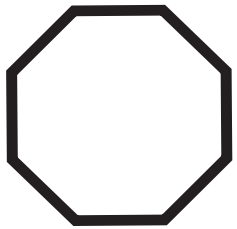
$4 \times \frac{1}{3}$ =

MY LAST SCORE?! ..... HAVE I BEAT THAT?! .....

NAME: CLASS: DATE:

SAFE 15 | WK: 2 | /10

1



Tick if true:

6 sides ☐

8 sides ☐

All internal angles are the same ☐

All internal angles are different ☐

2

3 L = _____ ml

$3\frac{1}{2}$ L = _____ ml

3.5 L = _____ ml

3 How long from?

02:20 to 02:35

4 How long from?

08:20 to 09:05

5 How long from?

06:10

to

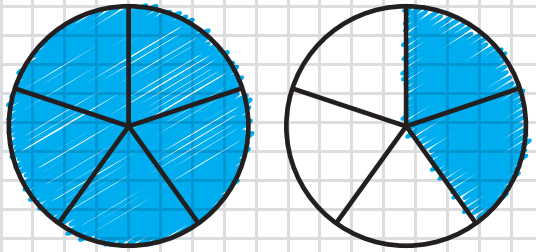
09:05

6

$\frac{1}{8}$ of 48 =

$\frac{5}{8}$ of 48 =

7



Mixed number → _____

Improper fraction → _____

8

0.02 as a proper fraction =

$\frac{72}{100}$ as a decimal =

9 Write these fractions as decimal equivalents

$\frac{3}{4}$ = $\frac{1}{10}$ = $\frac{1}{2}$ =

10

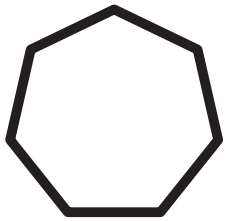
$8 \times \frac{1}{4}$ =

MY LAST SCORE?! ..... HAVE I BEAT THAT?! .....

NAME: CLASS: DATE:

SAFE 15 | WK: 3 | /10

1



Tick if true:

7 sides ☐

5 sides ☐

All internal angles are the same ☐

Is a pentagon ☐

2

6 L = _____ ml

$6\frac{1}{4}$ L = _____ ml

6.5 L = _____ ml

3 How long from?

09:30 to 09:50

4 How long from?

10:15 to 11:35

5 How long from?

01:10

to

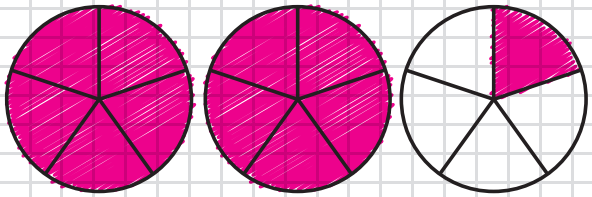
05:30

6

$\frac{1}{6}$ of 36 =

$\frac{4}{6}$ of 36 =

7



Mixed number → _____

Improper fraction → _____

8

0.62 as a proper fraction =

$\frac{11}{100}$ as a decimal =

9 Write these fractions as decimal equivalents

$\frac{3}{4}$ = $\frac{1}{100}$ = $\frac{1}{10}$ =

10

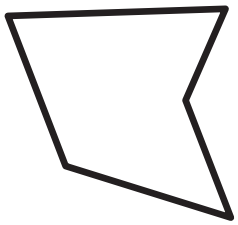
$5 \times \frac{1}{3}$ =

MY LAST SCORE?! ..... HAVE I BEAT THAT?! .....

NAME: CLASS: DATE:

SAFE 15 | WK:4 | /10

1



Tick if true:

8 sides ☐

5 sides ☐

Is a regular polygon ☐

Is a pentagon ☐

2

4 L = _____ ml

$4\frac{1}{2}$ L = _____ ml

$4\frac{3}{4}$ L = _____ ml

3 How long from?

10:35 to 10:55

4 How long from?

06:30 to 07:30

5 How long from?

03:15

to

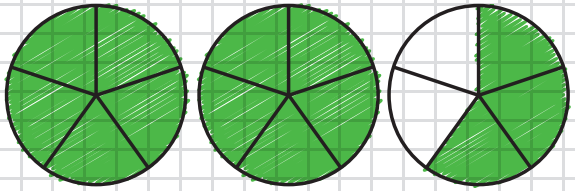
06:45

6

$\frac{1}{7}$ of 56 =

$\frac{5}{7}$ of 56 =

7



Mixed number → _____

Improper fraction → _____

8

0.17 as a proper fraction =

$\frac{19}{100}$ as a decimal =

9 Write these fractions as decimal equivalents

$\frac{1}{10}$ = $\frac{1}{2}$ = $\frac{3}{4}$ =

10

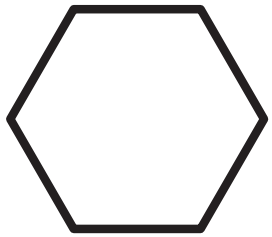
$3 \times \frac{1}{2}$ =

MY LAST SCORE?! ..... HAVE I BEAT THAT?! .....

NAME: CLASS: DATE:

SAFE 15 | WK: 5 | /10

1



Tick if true:

6 sides ☐

5 sides ☐

Is a hexagon ☐

7 sides ☐

2

8 L = _____ ml

$8\frac{1}{4}$ L = _____ ml

$8\frac{1}{2}$ L = _____ ml

3 How long from?

07:05 to 07:45

4 How long from?

08:20 to 09:15

5 How long from?

07:05

to

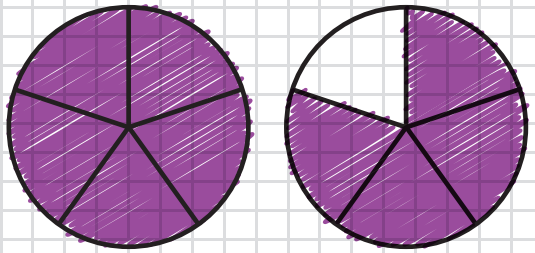
09:55

6

$\frac{1}{4}$ of 32 =

$\frac{3}{4}$ of 32 =

7



Mixed number → _____

Improper fraction → _____

8

0.43 as a proper fraction =

$\frac{67}{100}$ as a decimal =

9 Write these fractions as decimal equivalents

$\frac{3}{4}$ = $\frac{1}{2}$ = $\frac{1}{10}$ =

10

$9 \times \frac{1}{7}$ =

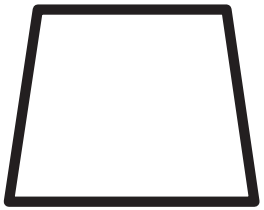
MY LAST SCORE?! ..... HAVE I BEAT THAT?! .....

Andrell Education Ltd

NAME: CLASS: DATE:

SAFE 15 | WK: 6 | /10

1



Tick if true:

4 sides ☐

7 sides ☐

Is a trapezium ☐

Is a hexagon ☐

2

9 L = _____ ml

$9\frac{1}{2}$ L = _____ ml

9.5 L = _____ ml

3 How long from?

04:15 to 04:20

4 How long from?

06:10 to 07:25

5 How long from?

03:25

to

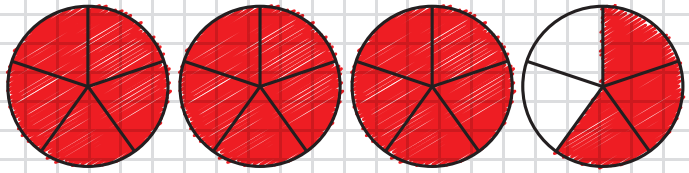
07:15

6

$\frac{1}{7}$ of 49 =

$\frac{5}{7}$ of 49 =

7



Mixed number → _____

Improper fraction → _____

8

0.69 as a proper fraction =

$\frac{96}{100}$ as a decimal =

9 Write these fractions as decimal equivalents

$\frac{1}{4}$ = $\frac{1}{10}$ = $\frac{1}{100}$ =

10

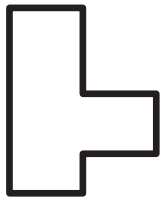
$7 \times \frac{1}{5}$ =

MY LAST SCORE?! ..... HAVE I BEAT THAT?! .....

NAME: CLASS: DATE:

SAFE 15 | WK: 7 | /10

1



Tick if true:

8 sides ☐

7 sides ☐

Is a rhombus ☐

Is an octagon ☐

2

3 L = _____ ml

$3\frac{3}{4}$ L = _____ ml

3.5 L = _____ ml

3 How long from?

09:30 to 09:55

4 How long from?

08:50 to 09:05

5 How long from?

01:10

to

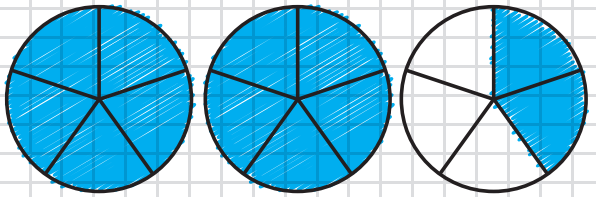
05:40

6

$\frac{1}{3}$ of 27 =

$\frac{2}{3}$ of 27 =

7



Mixed number → _____

Improper fraction → _____

8

0.21 as a proper fraction =

$\frac{37}{100}$ as a decimal =

9 Write these fractions as decimal equivalents

$\frac{3}{4}$ = $\frac{1}{2}$ = $\frac{1}{100}$ =

10

$6 \times \frac{1}{4} =$

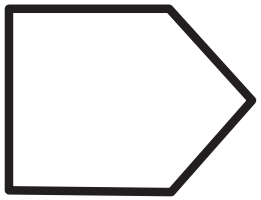
MY LAST SCORE?! ..... HAVE I BEAT THAT?! .....

Andrell Education Ltd

NAME: CLASS: DATE:

SAFE 15 | WK: 8 | /10

1



Tick if true:

7 sides ☐

5 sides ☐

Is a pentagon ☐

Is a square ☐

2

2 L = _____ ml

$2\frac{1}{4}$ L = _____ ml

$2\frac{1}{2}$ L = _____ ml

3 How long from?

12:05 to 12:40

4 How long from?

04:30 to 05:35

5 How long from?

09:05

to

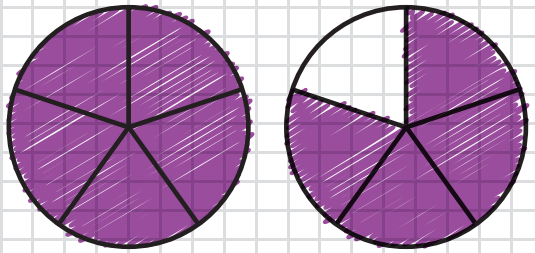
11:10

6

$\frac{1}{8}$ of 56 =

$\frac{3}{8}$ of 56 =

7



Mixed number → _____

Improper fraction → _____

8

0.62 as a proper fraction =

$\frac{71}{100}$ as a decimal =

9 Write these fractions as decimal equivalents

$\frac{1}{2}$ = $\frac{1}{10}$ = $\frac{1}{100}$ =

10

$7 \times \frac{1}{6} =$

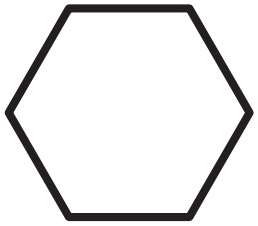
MY LAST SCORE?! ..... HAVE I BEAT THAT?! .....

Andrell Education Ltd

NAME: CLASS: DATE:

SAFE 15 | WK: 9 | /10

1



Tick if true:

8 sides ☐

6 sides ☐

Is a hexagon ☐

Is a triangle ☐

2

5 L = _____ ml

$5\frac{1}{2}$ L = _____ ml

$5\frac{3}{4}$ L = _____ ml

3 How long from?

03:05 to 03:25

4 How long from?

08:05 to 09:20

5 How long from?

04:55

to

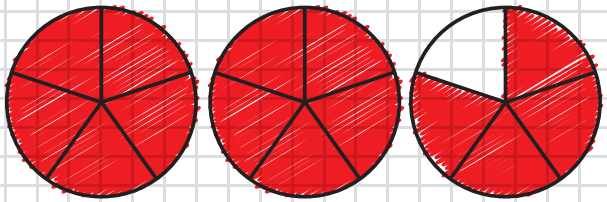
06:10

6

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

$\frac{4}{7}$ of 42 =

7



Mixed number → _____

Improper fraction → _____

8

0.06 as a proper fraction =

$\frac{9}{100}$ as a decimal =

9 Write these fractions as decimal equivalents

$\frac{1}{100}$ = $\frac{3}{4}$ = $\frac{1}{4}$ =

10

$8 \times \frac{1}{5} =$

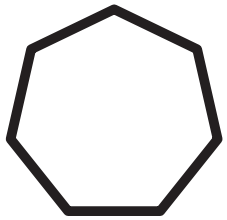
MY LAST SCORE?! ..... HAVE I BEAT THAT?! .....

Andrell Education Ltd

NAME: CLASS: DATE:

SAFE 15 | WK: 10 | /10

1



Tick if true:

7 sides ☐

4 sides ☐

Is a heptagon ☐

Is an octagon ☐

2

4 L = _____ ml

$4\frac{1}{4}$ L = _____ ml

$4\frac{1}{2}$ L = _____ ml

3 How long from?

05:10 to 05:40

4 How long from?

06:10 to 07:15

5 How long from?

02:40

to

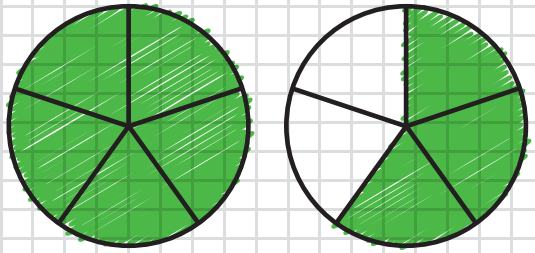
05:45

6

$\frac{1}{6}$ of 36 =

$\frac{5}{6}$ of 36 =

7



Mixed number → _____

Improper fraction → _____

8

0.91 as a proper fraction =

$\frac{44}{100}$ as a decimal =

9 Write these fractions as decimal equivalents

$\frac{1}{10}$ = $\frac{1}{4}$ = $\frac{1}{2}$ =

10

$6 \times \frac{1}{4} =$

MY LAST SCORE?! ..... HAVE I BEAT THAT?! .....

Andrell Education Ltd

ANSWERS

1

Which of these statements are true?:

6 sides ☑

Is a trapezium ☐

All internal angles are the same ☐

All internal angles are different ☑

2

4 L = 4000 ml

$4\frac{1}{2}$ L = 4500 ml

4.5 L = 4500 ml

3 How long from?

04:05 to 04:40

00:35

4 How long from?

03:40 to 04:25

00:45

5 How long from?

03:20 to 06:35

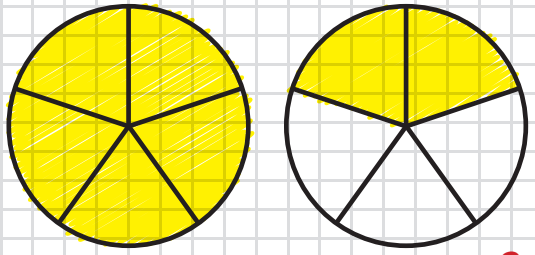
03:15

6

$\frac{1}{9}$ of 63 = 7

$\frac{4}{9}$ of 63 = 28

7



Mixed number → $1\frac{2}{5}$

Improper fraction → $\frac{7}{5}$

8

0.47 as a proper fraction = $\frac{47}{100}$

$\frac{38}{100}$ as a decimal = 0.38

9 Write these fractions as decimal equivalents

$\frac{1}{2}$ = 0.5 $\frac{1}{10}$ = 0.1 $\frac{1}{4}$ = 0.25

10

$4 \times \frac{1}{3} = \frac{4}{3}$

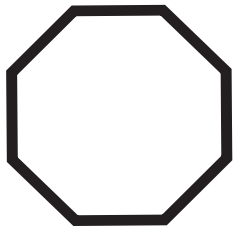
MY LAST SCORE?! .....

HAVE I BEAT THAT?! .....

ANSWERS

SAFE 15 | WK: 2 | /10

1



Tick if true:

6 sides ☐

8 sides ☑

All internal angles are the same ☑

All internal angles are different ☐

2

3 L = **3000** ml

$3\frac{1}{2}$ L = **3500** ml

3.5 L = **3500** ml

3 How long from?

02:20 to 02:35

00:15

4 How long from?

08:20 to 09:05

00:45

5 How long from?

06:10

to

09:05

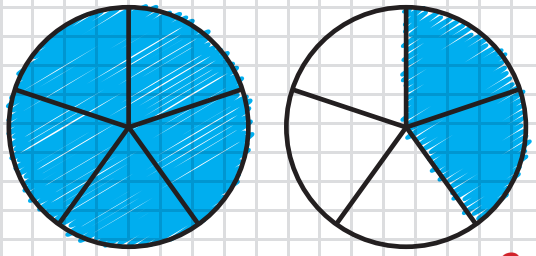
02:55

6

$\frac{1}{8}$ of 48 = **6**

$\frac{5}{8}$ of 48 = **30**

7



Mixed number → $1\frac{2}{5}$

Improper fraction → $\frac{7}{5}$

8

0.02 as a proper fraction = $\frac{2}{100}$

$\frac{72}{100}$ as a decimal = **0.72**

9 Write these fractions as decimal equivalents

$\frac{3}{4}$ = **0.75** $\frac{1}{10}$ = **0.1** $\frac{1}{2}$ = **0.5**

10

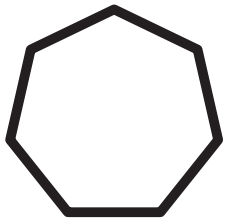
$8 \times \frac{1}{4} = \frac{8}{4}$

MY LAST SCORE?! ..... HAVE I BEAT THAT?! .....

ANSWERS

SAFE 15 | WK: 3 | /10

1



Tick if true:

7 sides ☑

5 sides ☐

All internal angles are the same ☑

Is a pentagon ☐

2

6 L = **6000** ml

$6\frac{1}{4}$ L = **6250** ml

6.5 L = **6500** ml

3 How long from?

09:30 to 09:50

00:20

4 How long from?

10:15 to 11:35

01:20

5 How long from?

01:10 to 05:30

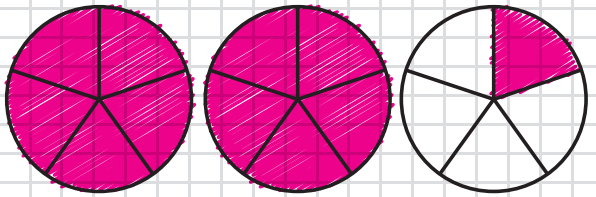
04:20

6

$\frac{1}{6}$ of 36 = **6**

$\frac{4}{6}$ of 36 = **24**

7



Mixed number → **$2\frac{1}{5}$**

Improper fraction → **$\frac{11}{5}$**

8

0.62 as a proper fraction = **$\frac{62}{100}$**

$\frac{11}{100}$ as a decimal = **0.11**

9 Write these fractions as decimal equivalents

$\frac{3}{4}$ = **0.75** $\frac{1}{100}$ = **0.01** $\frac{1}{10}$ = **0.1**

10

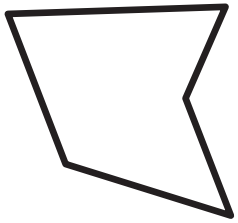
$5 \times \frac{1}{3} =$ **$\frac{5}{3}$**

MY LAST SCORE?! ..... HAVE I BEAT THAT?! .....

ANSWERS

SAFE 15 | WK:4 | /10

1



Tick if true:

8 sides ☐

5 sides ☑

Is a regular polygon ☐

Is a pentagon ☑

2

4 L = 4000 ml

$4\frac{1}{2}$ L = 4500 ml

$4\frac{3}{4}$ L = 4750 ml

3 How long from?

10:35 to 10:55

00:20

4 How long from?

06:30 to 07:30

01:00

5 How long from?

03:15 to 06:45

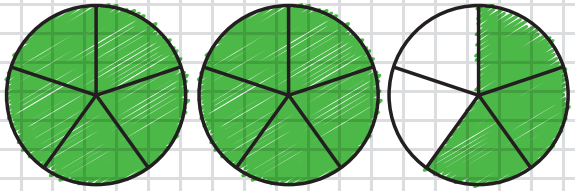
03:30

6

$\frac{1}{7}$ of 56 = 8

$\frac{5}{7}$ of 56 = 40

7



Mixed number → $2\frac{3}{5}$

Improper fraction → $\frac{13}{5}$

8

0.17 as a proper fraction = $\frac{17}{100}$

$\frac{19}{100}$ as a decimal = 0.19

9 Write these fractions as decimal equivalents

$\frac{1}{10}$ = 0.1 $\frac{1}{2}$ = 0.5 $\frac{3}{4}$ = 0.75

10

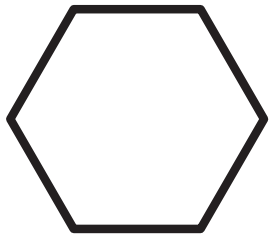
$3 \times \frac{1}{2} = \frac{3}{2}$

MY LAST SCORE?! ..... HAVE I BEAT THAT?! .....

ANSWERS

SAFE 15 | WK: 5 | /10

1



Tick if true:

6 sides ☑

5 sides ☐

Is a hexagon ☑

7 sides ☐

2

8 L = **8000** ml

8 $\frac{1}{4}$ L = **8250** ml

8 $\frac{1}{2}$ L = **8500** ml

3 How long from?

07:05 to 07:45

00:40

4 How long from?

08:20 to 09:15

00:55

5 How long from?

07:05

to

09:55

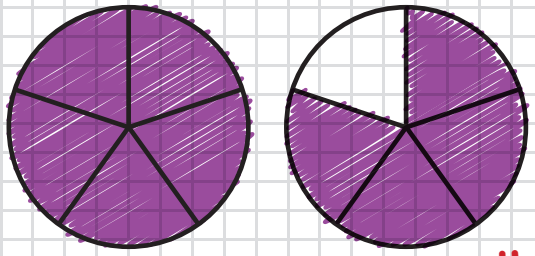
02:50

6

$\frac{1}{4}$ of 32 = **8**

$\frac{3}{4}$ of 32 = **24**

7



Mixed number → **$1\frac{4}{5}$**

Improper fraction → **$\frac{9}{5}$**

8

0.43 as a proper fraction = **$\frac{43}{100}$**

$\frac{67}{100}$ as a decimal = **0.67**

9 Write these fractions as decimal equivalents

$\frac{3}{4}$ = **0.75** $\frac{1}{2}$ = **0.5** $\frac{1}{10}$ = **0.1**

10

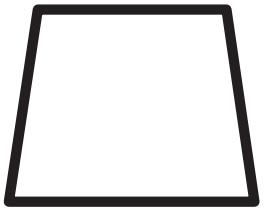
9 x $\frac{1}{7}$ = **$\frac{9}{7}$**

MY LAST SCORE?! ..... HAVE I BEAT THAT?! .....

Andrell Education Ltd

ANSWERS

1



Tick if true:

- 4 sides ☑
- 7 sides ☐
- Is a trapezium ☑
- Is a hexagon ☐

2

9 L = **9000** ml

$9\frac{1}{2}$ L = **9500** ml

9.5 L = **9500** ml

3 How long from?

04:15 to 04:20

00:05

4 How long from?

06:10 to 07:25

01:15

5 How long from?

03:25 to 07:15

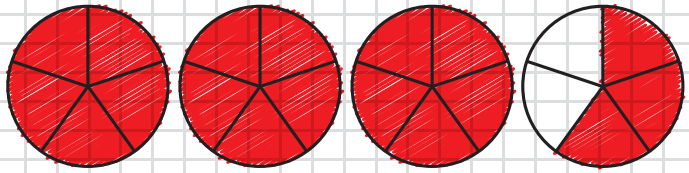
03:50

6

$\frac{1}{7}$ of 49 = **7**

$\frac{5}{7}$ of 49 = **35**

7



Mixed number → **$3\frac{3}{5}$**

Improper fraction → **$\frac{18}{5}$**

8

0.69 as a proper fraction = **$\frac{69}{100}$**

$\frac{96}{100}$ as a decimal = **0.96**

9 Write these fractions as decimal equivalents

$\frac{1}{4}$ = **0.25** $\frac{1}{10}$ = **0.1** $\frac{1}{100}$ = **0.01**

10

$7 \times \frac{1}{5} = \frac{7}{5}$

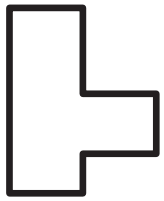
MY LAST SCORE?! ..... HAVE I BEAT THAT?! .....

Andrell Education Ltd

ANSWERS

SAFE 15 | WK: 7 | /10

1



Tick if true:

8 sides ☑

7 sides ☐

Is a rhombus ☐

Is an octagon ☑

2

3 L = **3000** ml

$3\frac{3}{4}$ L = **3750** ml

3.5 L = **3500** ml

3 How long from?

09:30 to 09:55

00:25

4 How long from?

08:50 to 09:05

00:15

5 How long from?

01:10 to 05:40

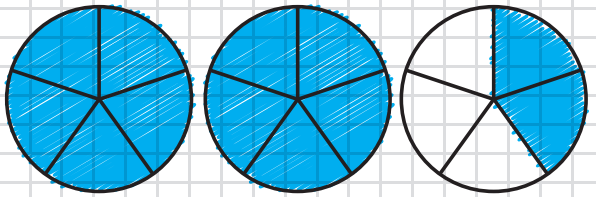
04:30

6

$\frac{1}{3}$ of 27 = **9**

$\frac{2}{3}$ of 27 = **18**

7



Mixed number → $2\frac{2}{5}$

Improper fraction → $\frac{12}{5}$

8

0.21 as a proper fraction = $\frac{21}{100}$

$\frac{37}{100}$ as a decimal = **0.37**

9 Write these fractions as decimal equivalents

$\frac{3}{4}$ = **0.75** $\frac{1}{2}$ = **0.5** $\frac{1}{100}$ = **0.01**

10

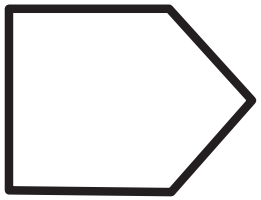
$6 \times \frac{1}{4} = \frac{6}{4}$

MY LAST SCORE?! ..... HAVE I BEAT THAT?! .....

ANSWERS

SAFE 15 | WK: 8 | /10

1



Tick if true:

7 sides ☐

5 sides ☑

Is a pentagon ☑

Is a square ☐

2

2 L = **2000** ml

$2\frac{1}{4}$ L = **2250** ml

$2\frac{1}{2}$ L = **2500** ml

3 How long from?

12:05 to 12:40

00:35

4 How long from?

04:30 to 05:35

01:05

5 How long from?

09:05

to

11:10

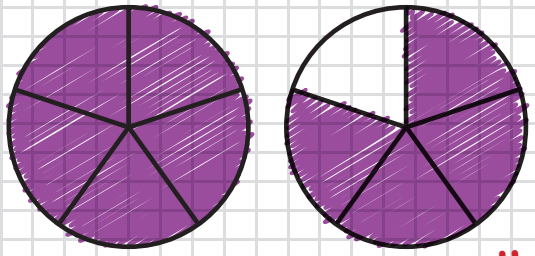
02:05

6

$\frac{1}{8}$ of 56 = **7**

$\frac{3}{8}$ of 56 = **21**

7



Mixed number → **$1\frac{4}{5}$**

Improper fraction → **$\frac{9}{5}$**

8

0.62 as a proper fraction = **$\frac{62}{100}$**

$\frac{71}{100}$ as a decimal = **0.71**

9 Write these fractions as decimal equivalents

$\frac{1}{2}$ = **0.5** $\frac{1}{10}$ = **0.1** $\frac{1}{100}$ = **0.01**

10

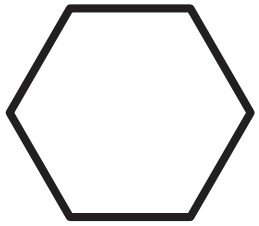
$7 \times \frac{1}{6} = \frac{7}{6}$

MY LAST SCORE?! ..... HAVE I BEAT THAT?! .....

ANSWERS

SAFE 15 | WK: 9 | /10

1



Tick if true:

8 sides ☐

6 sides ☑

Is a hexagon ☑

Is a triangle ☐

2

5 L = 5000 ml

$5\frac{1}{2}$ L = 5500 ml

$5\frac{3}{4}$ L = 5750 ml

3 How long from?

03:05 to 03:25

00:20

4 How long from?

08:05 to 09:20

01:15

5 How long from?

04:55 to 06:10

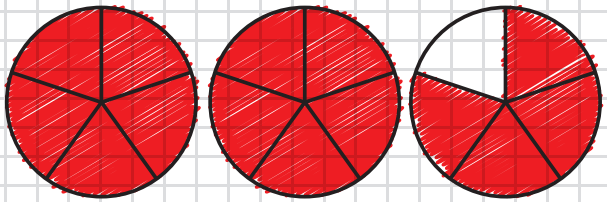
01:15

6

$\frac{1}{7}$ of 42 = 6

$\frac{4}{7}$ of 42 = 24

7



Mixed number → $2\frac{4}{5}$

Improper fraction → $\frac{14}{5}$

8

0.06 as a proper fraction = $\frac{6}{100}$

$\frac{9}{100}$ as a decimal = 0.09

9 Write these fractions as decimal equivalents

$\frac{1}{100}$ = 0.01 $\frac{3}{4}$ = 0.75 $\frac{1}{4}$ = 0.25

10

$8 \times \frac{1}{5} = \frac{8}{5}$

MY LAST SCORE?! .....

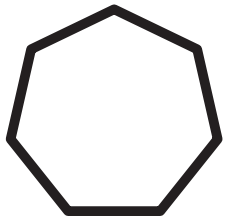
HAVE I BEAT THAT?! .....

Andrell Education Ltd

ANSWERS

SAFE 15 | WK: 10 | /10

1



Tick if true:

7 sides ☑

4 sides ☐

Is a heptagon ☑

Is an octagon ☐

2

4 L = **4000** ml

$4\frac{1}{4}$ L = **4250** ml

$4\frac{1}{2}$ L = **4500** ml

3 How long from?

05:10 to 05:40

00:30

4 How long from?

06:10 to 07:15

01:05

5 How long from?

02:40 to 05:45

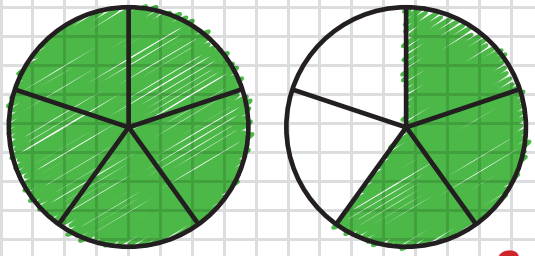
03:05

6

$\frac{1}{6}$ of 36 = **6**

$\frac{5}{6}$ of 36 = **30**

7



Mixed number → **$1\frac{3}{5}$**

Improper fraction → **$\frac{8}{5}$**

8

0.91 as a proper fraction = **$\frac{91}{100}$**

$\frac{44}{100}$ as a decimal = **0.44**

9 Write these fractions as decimal equivalents

$\frac{1}{10}$ = **0.1** $\frac{1}{4}$ = **0.25** $\frac{1}{2}$ = **0.5**

10

$6 \times \frac{1}{4} = \frac{6}{4}$

MY LAST SCORE?! ..... HAVE I BEAT THAT?! .....