

Year 3 and Year 4 Fractions and Decimals, Unit 1 (34878)

Additional teacher instructions for practice sheets

These notes indicate which practice sheets are most appropriate for which groups.

Day 1 Y3 Matching fractions Sheet 1

Working towards ARE

Children use cubes to help.

Day 1 Y3 Matching fractions Sheet 2

Working at ARE / Greater Depth

Greater Depth complete the Challenge.

Day 1 Y4 Finding fractions Sheet 3

Working towards ARE

Day 1 Y4 Finding fractions Sheet 4

Working at ARE / Greater Depth

Day 2 Y3 Find fractions of amounts Sheet 1

Working towards ARE

Day 2 Y3 Find fractions of amounts Sheet 2

Working at ARE / Greater Depth

Day 2 Y4 Fact webs Sheet 3 (2 pages)

Working towards ARE

Day 2 Y4 Find fractions of amounts Sheet 4

Working at ARE

Day 2 Y4 Find fractions of amounts Sheet 5

Greater Depth

Day 3 Y3 Finding equivalent fractions Sheet 1

Working towards ARE / Working at ARE / Greater Depth

Working towards ARE find $\frac{1}{2}$ and $\frac{1}{4}$ equivalents using a fraction wall for reference (see resources).

Working at ARE find at least $\frac{1}{2}$ and $\frac{1}{4}$ equivalents.

Greater Depth also find $\frac{1}{3}$ and $\frac{2}{3}$ equivalents.

Day 3 Y4 Equivalent fractions and decimals Sheet 2

Working towards ARE

Day 3 Y4 Equivalent fractions and decimals Sheet 3

Working at ARE / Greater Depth

Year 3 and Year 4 Fractions and Decimals, Unit 1 (34878)

Additional teacher instructions for practice sheets (continued)

These notes indicate which practice sheets are most appropriate for which groups.

Day 4 Y3 Finding tenths Sheet 1

Working towards ARE / Working at ARE / Greater Depth

Working towards ARE may use counters.

Greater Depth complete the Challenge.

Day 4 Y4 Equivalent fractions and decimals Sheet 2

Working towards ARE / Working at ARE / Greater Depth

Day 5 Y3 Adding and subtracting fractions Sheet 1

Working towards ARE / Working at ARE / Greater Depth

Working towards ARE use a number line or pizza image (see resources) to support.

Greater Depth complete the Challenge.

Day 5 Y4 Fraction word problems Sheet 2

Working towards ARE

Day 5 Y4 Fraction word problems Sheet 3

Working at ARE / Greater Depth

Matching fractions

Sheet 1

Circle the unit fractions that each number can be split into to give a whole number.

18 $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{1}{6}$

20 $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{1}{6}$

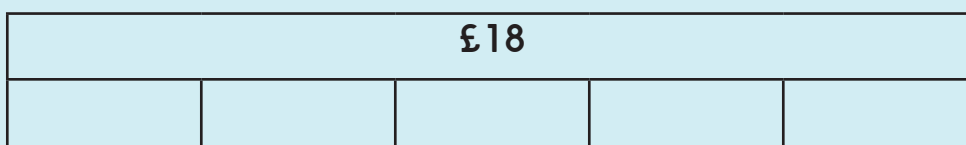
24 $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{1}{6}$

25 $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{1}{6}$

30 $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{1}{6}$

Challenge

In the first question, you found that 18 couldn't be split into $\frac{1}{5}$ s. But that's not strictly true... Have a go at finding $\frac{1}{5}$ of £18. You might like to use some coins and a bar model to help.



Matching fractions

Sheet 2

Circle the unit fractions that each number can be split into to give a whole number.

25 $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{1}{6}$ $\frac{1}{8}$ $\frac{1}{10}$ $\frac{1}{12}$

28 $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{1}{6}$ $\frac{1}{8}$ $\frac{1}{10}$ $\frac{1}{12}$

40 $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{1}{6}$ $\frac{1}{8}$ $\frac{1}{10}$ $\frac{1}{12}$

36 $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{1}{6}$ $\frac{1}{8}$ $\frac{1}{10}$ $\frac{1}{12}$

42 $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{1}{6}$ $\frac{1}{8}$ $\frac{1}{10}$ $\frac{1}{12}$

60 $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{1}{6}$ $\frac{1}{8}$ $\frac{1}{10}$ $\frac{1}{12}$

Challenge

Suggest a number that can be split into each of these sets of fractions:

$$\frac{1}{2} \quad \frac{1}{4} \quad \frac{1}{5} \quad \frac{1}{10}$$

$$\frac{1}{2} \quad \frac{1}{4} \quad \frac{1}{8} \quad \frac{1}{12}$$

$$\frac{1}{2} \quad \frac{1}{3} \quad \frac{1}{5} \quad \frac{1}{10}$$

Finding fractions

Sheet 3

Find the following:

1. $\frac{1}{4}$ of 24

2. $\frac{1}{4}$ of 240

3. $\frac{1}{5}$ of 35

4. $\frac{1}{5}$ of 350

5. $\frac{1}{3}$ of 18

6. $\frac{1}{3}$ of 180

7. $\frac{1}{6}$ of 30

8. $\frac{1}{6}$ of 300

9. $\frac{1}{4}$ of 32

10. $\frac{1}{4}$ of 320

Finding fractions

Sheet 4

Find the following:

1. $\frac{1}{4}$ of 240

2. $\frac{1}{3}$ of 360

3. $\frac{1}{5}$ of 350

4. $\frac{1}{6}$ of 360

5. $\frac{1}{3}$ of 270

6. $\frac{1}{4}$ of 440

7. $\frac{1}{6}$ of 480

8. $\frac{1}{7}$ of 280

9. $\frac{1}{8}$ of 320

10. $\frac{1}{9}$ of 360

Challenge

How many different fractions of 360 can you find?

Find fractions of amounts

Sheet 1

1.

12		

 $\frac{1}{3}$ of 12 $\frac{2}{3}$ of 12

2.

15		

 $\frac{1}{3}$ of 15 $\frac{2}{3}$ of 15

3.

20			

 $\frac{1}{4}$ of 20 $\frac{3}{4}$ of 20

4.

16			

 $\frac{1}{4}$ of 16 $\frac{3}{4}$ of 16

5.

15				

 $\frac{1}{5}$ of 15 $\frac{3}{5}$ of 15

6.

20				

 $\frac{1}{5}$ of 20 $\frac{2}{5}$ of 20

7.

16							

 $\frac{1}{8}$ of 16 $\frac{5}{8}$ of 16

8.

40							

 $\frac{1}{8}$ of 40 $\frac{3}{8}$ of 40

Find fractions of amounts

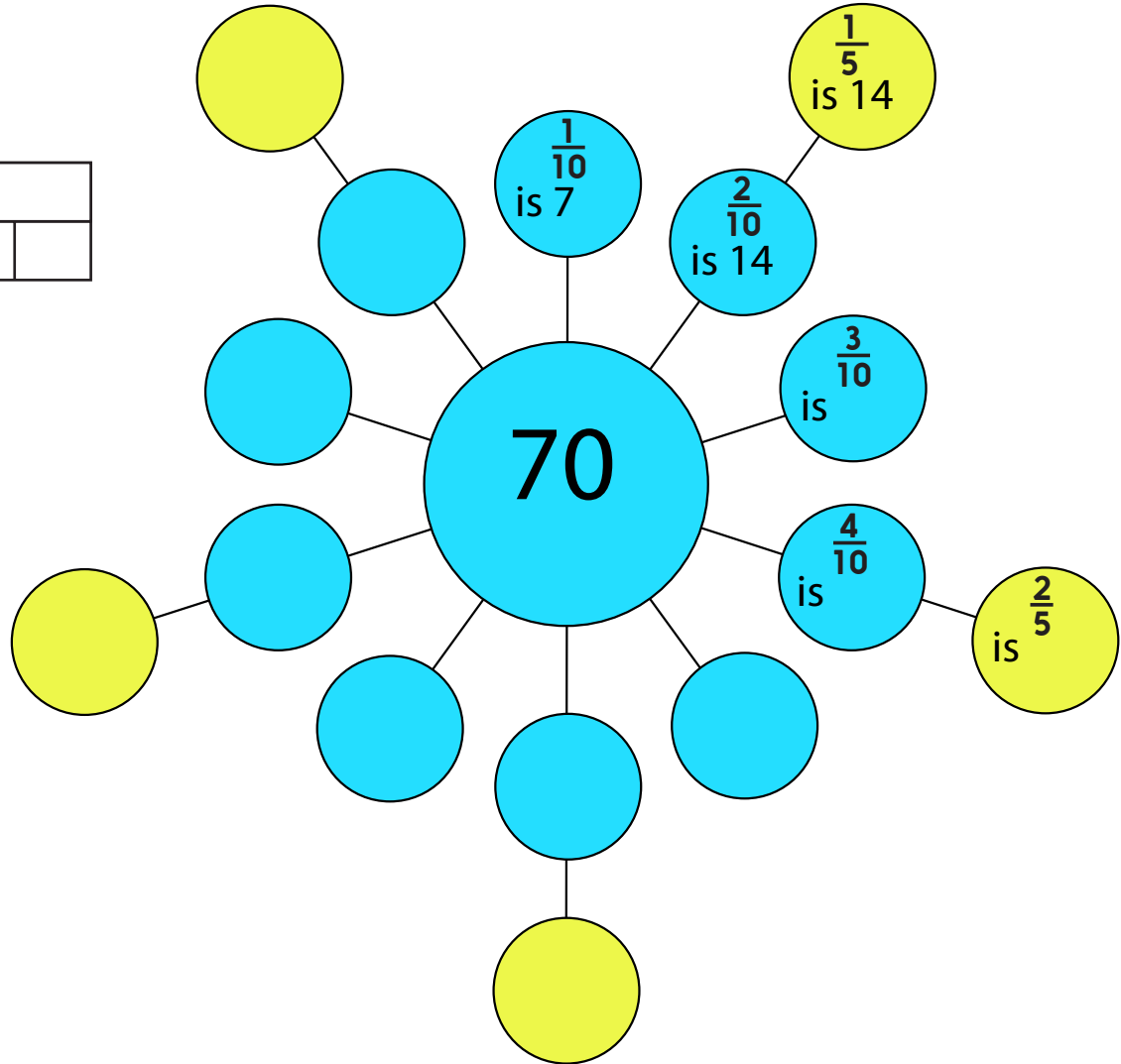
Sheet 2

- | | | |
|-----|----------------------|----------------------|
| 1. | $\frac{1}{3}$ of 12 | $\frac{2}{3}$ of 12 |
| 2. | $\frac{1}{3}$ of 15 | $\frac{2}{3}$ of 15 |
| 3. | $\frac{1}{4}$ of 20 | $\frac{3}{4}$ of 20 |
| 4. | $\frac{1}{4}$ of 16 | $\frac{3}{4}$ of 16 |
| 5. | $\frac{1}{5}$ of 15 | $\frac{3}{5}$ of 15 |
| 6. | $\frac{1}{5}$ of 20 | $\frac{2}{5}$ of 20 |
| 7. | $\frac{1}{8}$ of 16 | $\frac{5}{8}$ of 16 |
| 8. | $\frac{1}{8}$ of 40 | $\frac{3}{8}$ of 40 |
| 9. | $\frac{1}{4}$ of 32 | $\frac{3}{4}$ of 32 |
| 10. | $\frac{1}{10}$ of 80 | $\frac{3}{10}$ of 80 |
| 11. | $\frac{1}{6}$ of 12 | $\frac{5}{6}$ of 12 |
| 12. | $\frac{1}{6}$ of 30 | $\frac{5}{6}$ of 30 |

Fact webs

Sheet 3

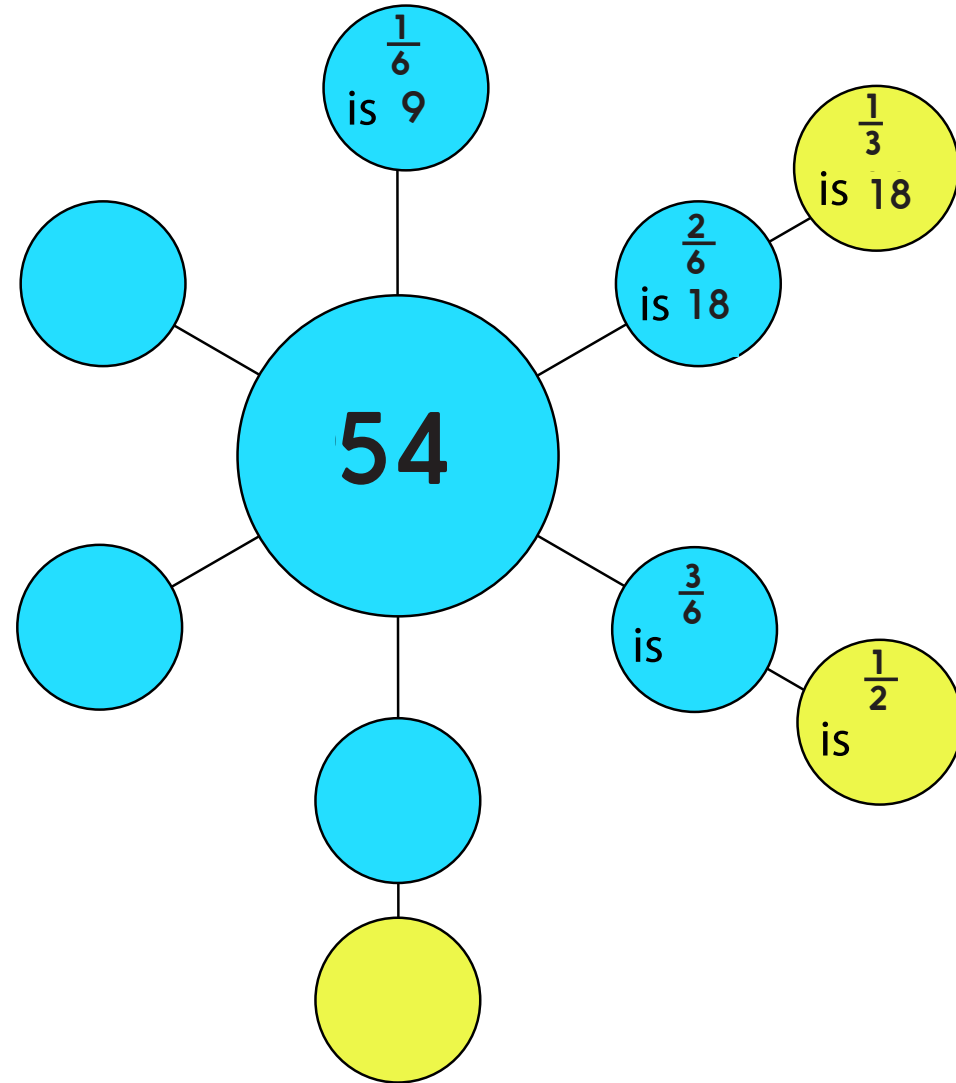
70									



Fact webs

Sheet 3 continued

54					



Challenge

Now draw your own fact web!
Choose from:

$\frac{1}{8}$ s and $\frac{1}{4}$ s of 96

$\frac{1}{12}$ s and $\frac{1}{6}$ s of 84

Find fractions of amounts

Sheet 4

21		

90									

30					

48			

35						

48							

40				

27								

- $\frac{1}{3}$ of 21 $\frac{2}{3}$ of 21
- $\frac{1}{10}$ of 90 $\frac{7}{10}$ of 90
- $\frac{1}{6}$ of 30 $\frac{5}{6}$ of 30
- $\frac{1}{4}$ of 48 $\frac{3}{4}$ of 48
- $\frac{1}{7}$ of 35 $\frac{3}{7}$ of 35
- $\frac{1}{8}$ of 48 $\frac{5}{8}$ of 48
- $\frac{1}{5}$ of 40 $\frac{4}{5}$ of 40
- $\frac{1}{9}$ of 27 $\frac{4}{9}$ of 27

**Make up your own
fraction facts for 24.**

Find fractions of amounts

Sheet 5

1. $\frac{2}{3}$ of 27

6. $\frac{5}{8}$ of 48

2. $\frac{7}{10}$ of 90

7. $\frac{4}{5}$ of 55

3. $\frac{5}{6}$ of 42

8. $\frac{4}{9}$ of 27

4. $\frac{3}{4}$ of 48

9. $\frac{5}{7}$ of 56

5. $\frac{3}{7}$ of 35

10. $\frac{3}{9}$ of 81

Challenge

Find the missing numbers:

$$\frac{\bigcirc}{10} \text{ of } 10 = 7$$

$$\frac{3}{\bigcirc} \text{ of } 32 = 12$$

$$\frac{5}{7} \text{ of } \bigcirc = 55$$

$$\frac{5}{\bigcirc} \text{ of } 16 = 16$$

Finding equivalent fractions

Sheet 1

Use different coloured pencils to circle equivalent fractions.

Can you find equivalents for $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$ and $\frac{2}{3}$?

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

$$\frac{6}{12}$$

$$\frac{8}{12}$$

$$\frac{1}{2}$$

$$\frac{3}{12}$$

$$\frac{4}{8}$$

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

$$\frac{3}{6}$$

$$\frac{4}{12}$$

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

$$\frac{4}{16}$$

$$\frac{5}{10}$$

$$\frac{2}{6}$$

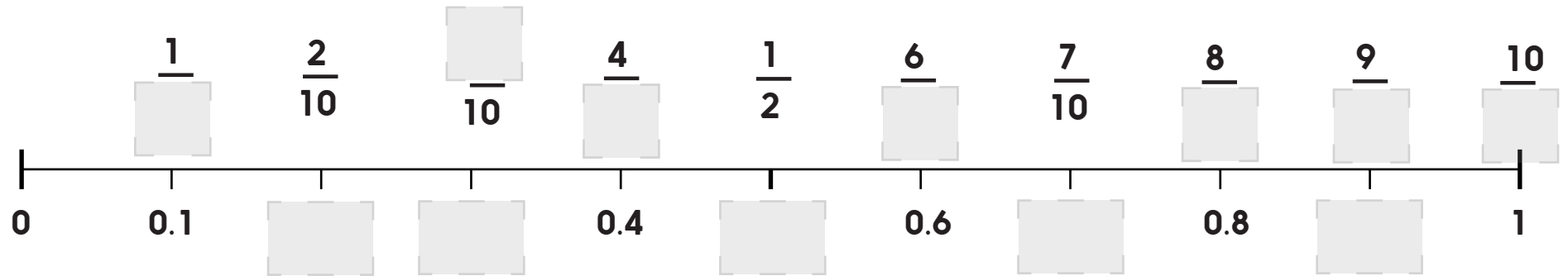
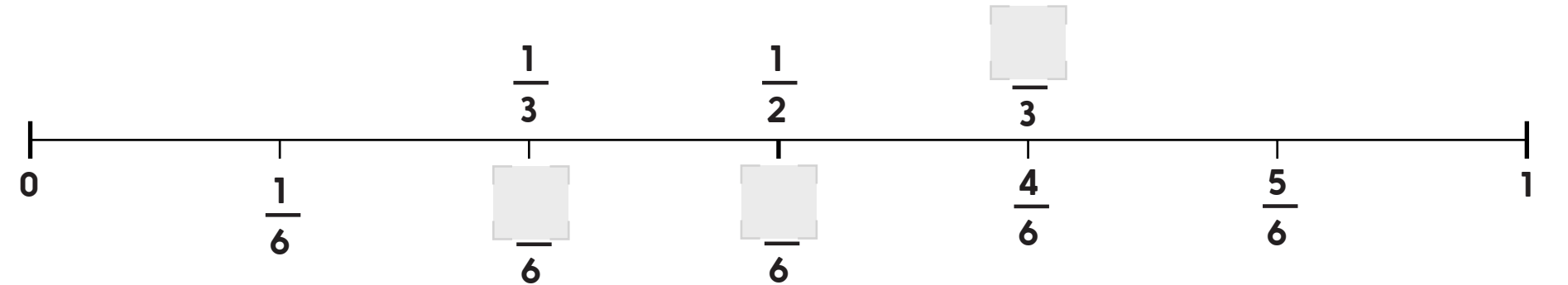
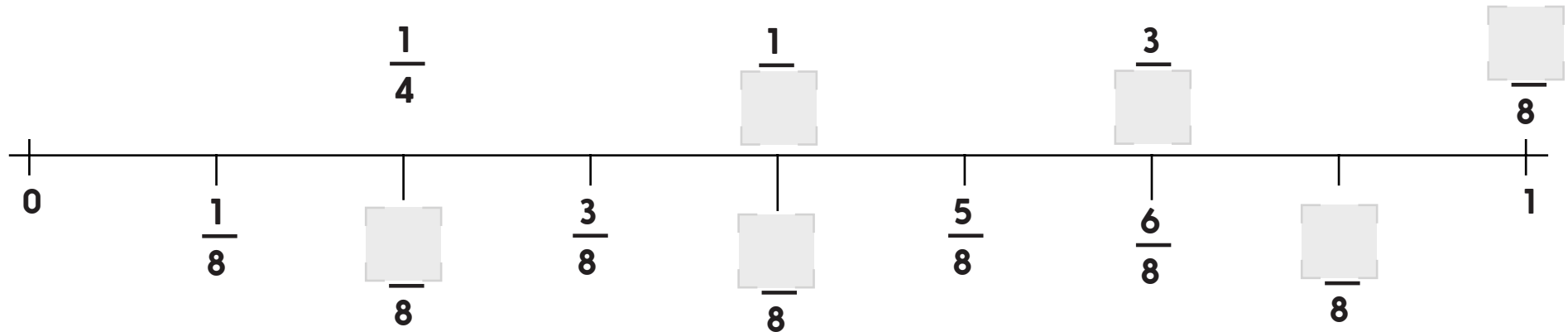
$$\frac{1}{4}$$

$$\frac{2}{8}$$

$$\frac{1}{3}$$

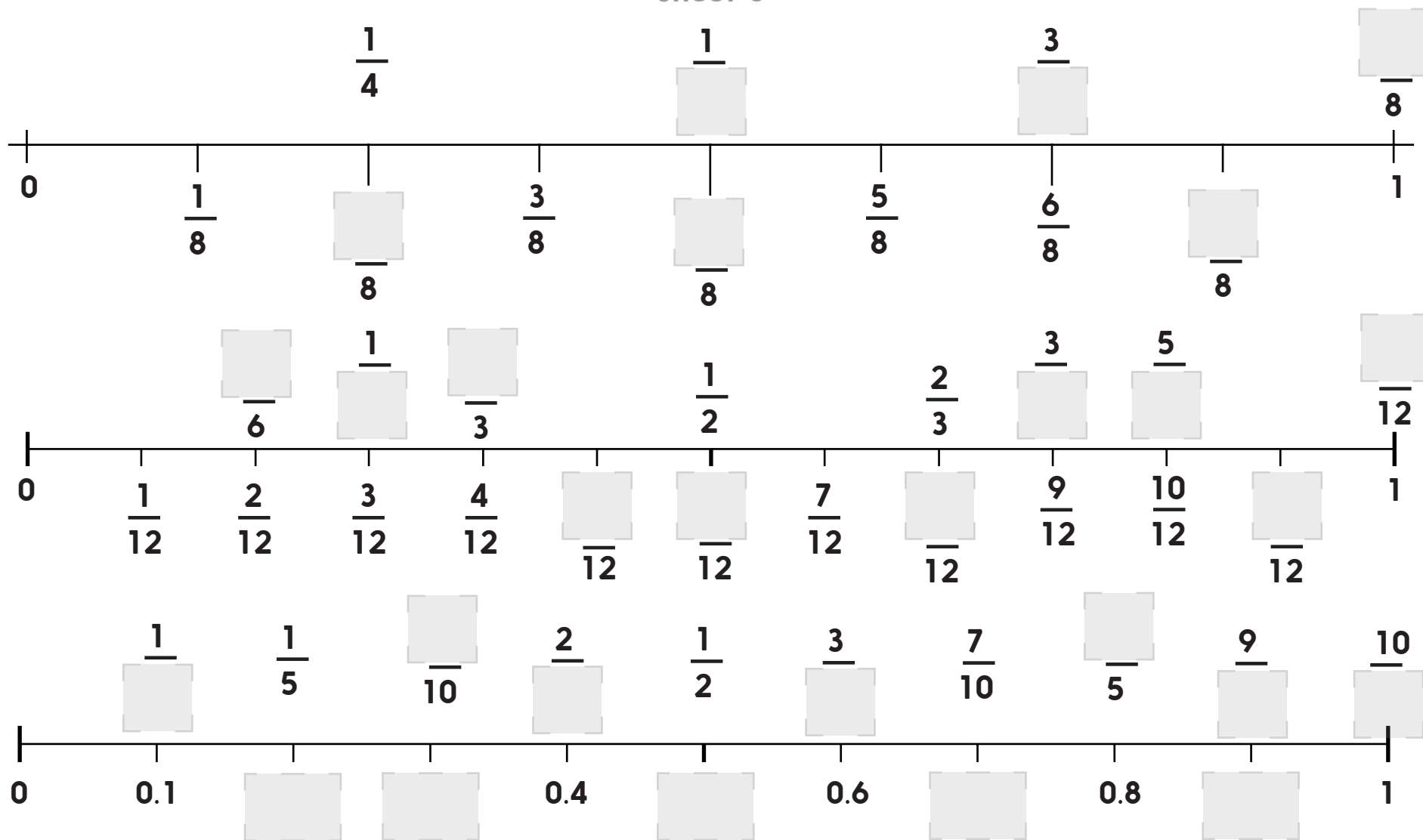
Finding equivalent fractions

Sheet 2



Equivalent fractions and decimals

Sheet 3



Finding tenths

Sheet 1

Find the following:

1. $\frac{1}{10}$ of 50 =

6. $\frac{5}{10}$ of 40 =

2. $\frac{4}{10}$ of 50 =

7. $\frac{8}{10}$ of 60 =

3. $\frac{9}{10}$ of 50 =

8. $\frac{7}{10}$ of 70 =

4. $\frac{2}{10}$ of 80 =

9. $\frac{3}{10}$ of 90 =

5. $\frac{6}{10}$ of 80 =

10. $\frac{9}{10}$ of 100 =

Challenge

$\frac{3}{10}$ of = 15

I think of a number, I find $\frac{2}{10}$ and get 16. What was my number?

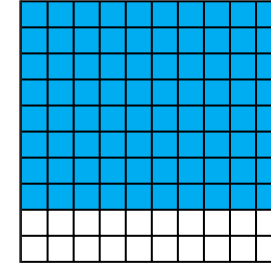
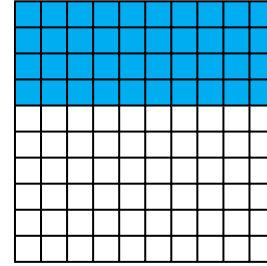
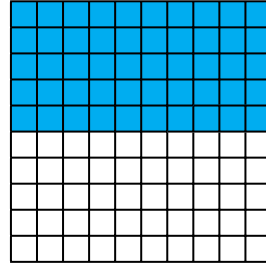
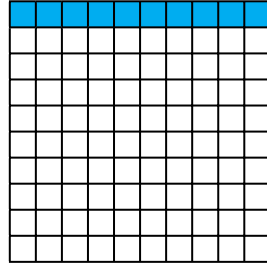
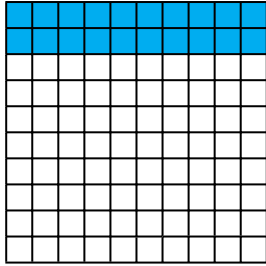
of 60 = 36

Now make up some more problems like these for your partner to solve.

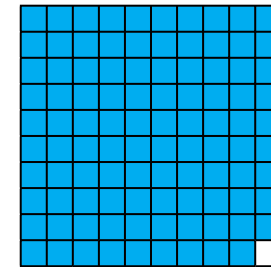
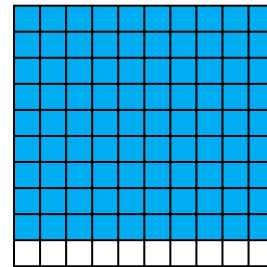
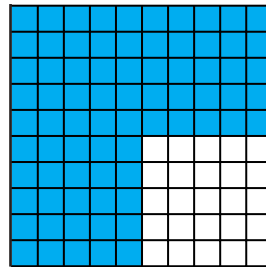
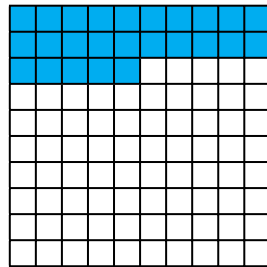
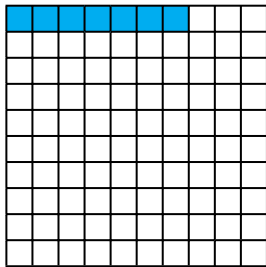
Equivalent fractions and decimals

Sheet 2

What fraction is shaded? Write it as a fraction and as a decimal.



$$\frac{20}{100} = \frac{2}{10} = \square$$



$$\frac{7}{100} = \square$$

Challenge

Six tenths lies between 40 and 70 hundredths. Can you find some other fractions that lie between this number of hundredths?

Adding and subtracting fractions

Sheet 1

Complete the following fraction number sentences:

1. $\frac{2}{6} + \frac{3}{6} =$

2. $\frac{4}{6} - \frac{2}{6} =$

3. $\frac{1}{6} + \frac{4}{6} =$

4. $\frac{4}{8} + \frac{3}{8} =$

5. $\frac{7}{8} - \frac{4}{8} =$

6. $\frac{5}{8} + \frac{2}{8} =$

7. $\frac{5}{10} + \frac{3}{10} =$

8. $\frac{4}{10} + \frac{4}{10} =$

9. $\frac{8}{10} - \frac{6}{10} =$

10. $\frac{6}{10} - \frac{5}{10} =$

Challenge 1

Do any of your answers have an equivalent fraction made from fewer parts?

e.g. $\frac{2}{6} = \frac{1}{3}$

2 parts 1 part

Challenge 2

Make up your own fraction additions that give answers of $\frac{4}{6}$, $\frac{5}{8}$ and $\frac{9}{10}$.

Make up your own fraction subtractions that give answers of $\frac{2}{6}$, $\frac{3}{8}$ and $\frac{4}{10}$.

Fraction word problems

Sheet 2

1. David is trying to remember how to find $\frac{3}{4}$ of 24.
Write instructions to help him.

2. Davina is walking 28 miles for charity.
So far she has walked $\frac{1}{4}$ of the way, how far has she walked so far?

3. A class raise £48 by selling badges.
They give $\frac{1}{2}$ to a children's charity, $\frac{1}{4}$ to an animal charity and the rest to school funds.
How much money goes to each?

4. Another class raise £60.
They give $\frac{1}{3}$ to school funds and $\frac{2}{3}$ to a children's charity. How much goes to each?

5. The O'Leary family are going on holiday.
The children are already asking,
"Are we nearly there yet?"
The journey is 90 miles. They have only driven $\frac{1}{10}$ of the way! How far have they got to go?

6. Faith has saved up £20 for when she goes on holiday.
She spends $\frac{1}{4}$ of the money on a book, $\frac{1}{4}$ on presents for friends and the rest on ice creams!
How much does she spend on each?

7. There are 20 chocolate buttons evenly spread on the top of a cake. One child eats $\frac{1}{2}$ of the cake, and another child eats $\frac{1}{4}$ of the cake.
How many chocolate buttons do they each eat?
How many buttons are left on the cake?

8. Another cake has 48 buttons evenly spread on the top. One child eats $\frac{1}{2}$ of the cake, and another child eats $\frac{1}{2}$ of the cake. How many chocolate buttons do they each eat? How many buttons are left on the cake?

Fraction word problems

Sheet 3

<p>1. David is trying to remember how to find $\frac{5}{8}$ of 80. Write instructions to help him.</p>	<p>2. Davina is walking 28 miles for charity. So far she has walked $\frac{1}{4}$ of the way, how much further does she have to go?</p>
<p>3. A class raise £72 by selling badges. They give $\frac{1}{2}$ to a children's charity, $\frac{1}{4}$ to an animal charity and the rest to school funds. How much money goes to each?</p>	<p>4. Another class raise £63. They give $\frac{2}{7}$ to school funds and $\frac{3}{7}$ to a children's charity and the rest to an animal charity. How much goes to each?</p>
<p>5. The O'Leary family are going on holiday. The children are already asking, "Are we nearly there yet?" The journey is 240 miles. They have only driven $\frac{1}{10}$ of the way! How far have they got to go?</p>	<p>6. Faith has saved up £25 for when she goes on holiday. She spends $\frac{1}{5}$ of the money on a book, $\frac{2}{5}$ on presents for friends and the rest on ice creams! How much does she spend on each?</p>
<p>7. There are 42 chocolate buttons evenly spread on the top of a cake. One child eats $\frac{1}{6}$ of the cake, and another child eats $\frac{1}{3}$ of the cake. How many chocolate buttons do they each eat? How many buttons are left on the cake?</p>	<p>8. Another cake has 48 buttons evenly spread on the top. One child eats $\frac{1}{8}$ and one very hungry child eats $\frac{5}{8}$ of the cake. How many chocolate buttons do they each eat? How many buttons are left on the cake?</p>

Fractions and decimals

Answers

Day 1 Y3 Matching fractions Sheet 1

18	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{6}$
20	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{6}$
24	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{6}$
25	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{6}$
30	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{6}$

Challenge

$\frac{1}{5}$ of £18 = £3.60

Day 1 Y3 Matching fractions Sheet 2

25	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{6}$	$\frac{1}{8}$	$\frac{1}{10}$	$\frac{1}{12}$
28	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{6}$	$\frac{1}{8}$	$\frac{1}{10}$	$\frac{1}{12}$
40	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{6}$	$\frac{1}{8}$	$\frac{1}{10}$	$\frac{1}{12}$
36	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{6}$	$\frac{1}{8}$	$\frac{1}{10}$	$\frac{1}{12}$
42	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{6}$	$\frac{1}{8}$	$\frac{1}{10}$	$\frac{1}{12}$
60	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{6}$	$\frac{1}{8}$	$\frac{1}{10}$	$\frac{1}{12}$

Challenge

$\frac{1}{2}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{1}{10}$ - 20, 40, (multiples of 20)
 $\frac{1}{2}$ $\frac{1}{4}$ $\frac{1}{8}$ $\frac{1}{12}$ - 24, 48, (multiples of 24)
 $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{5}$ $\frac{1}{10}$ - 30, 60, (multiples of 30)

Day 1 Y4 Finding fractions Sheet 3

- $\frac{1}{4}$ of 24 is 6
- $\frac{1}{4}$ of 240 is 60
- $\frac{1}{5}$ of 35 is 7
- $\frac{1}{5}$ of 350 is 70
- $\frac{1}{3}$ of 18 is 6
- $\frac{1}{3}$ of 180 is 60
- $\frac{1}{6}$ of 30 is 5
- $\frac{1}{6}$ of 300 is 50
- $\frac{1}{4}$ of 32 is 8
- $\frac{1}{4}$ of 320 is 80

Day 1 Y4 Finding fractions Sheet 4

- $\frac{1}{4}$ of 240 is 60
- $\frac{1}{3}$ of 360 is 120
- $\frac{1}{5}$ of 350 is 70
- $\frac{1}{6}$ of 360 is 60
- $\frac{1}{3}$ of 270 is 90
- $\frac{1}{4}$ of 440 is 110
- $\frac{1}{6}$ of 480 is 80
- $\frac{1}{7}$ of 280 is 40
- $\frac{1}{8}$ of 320 is 40
- $\frac{1}{9}$ of 360 is 40

Challenge

How many different fractions of 360 can you find?

e.g. $\frac{1}{2}$ of 360 = 180, $\frac{1}{3}$ of 360 = 120, $\frac{1}{4}$ of 360 = 90, $\frac{1}{5}$ of 360 = 72, $\frac{1}{6}$ of 360 = 60, $\frac{1}{8}$ of 360 = 45, $\frac{1}{9}$ of 360 = 40, $\frac{1}{10}$ of 360 = 36, $\frac{1}{12}$ of 360 = 30, and so on.

Fractions and decimals

Answers

Day 2 Y3 Find fractions of amounts Sheet 1

- | | | |
|----|---------------------------------|----------------------------------|
| 1. | $\frac{1}{3}$ of 12 is 4 | $\frac{2}{3}$ of 12 is 8 |
| 2. | $\frac{1}{3}$ of 15 is 5 | $\frac{2}{3}$ of 15 is 10 |
| 3. | $\frac{1}{4}$ of 20 is 5 | $\frac{3}{4}$ of 20 is 15 |
| 4. | $\frac{1}{4}$ of 16 is 4 | $\frac{3}{4}$ of 16 is 12 |
| 5. | $\frac{1}{5}$ of 15 is 3 | $\frac{3}{5}$ of 15 is 9 |
| 6. | $\frac{1}{5}$ of 20 is 4 | $\frac{2}{5}$ of 20 is 8 |
| 7. | $\frac{1}{8}$ of 16 is 2 | $\frac{5}{8}$ of 16 is 10 |
| 8. | $\frac{1}{8}$ of 40 is 5 | $\frac{3}{8}$ of 40 is 15 |

Day 2 Y3 Find fractions of amounts Sheet 2

- | | | |
|-----|----------------------------------|-----------------------------------|
| 1. | $\frac{1}{3}$ of 12 is 4 | $\frac{2}{3}$ of 12 is 8 |
| 2. | $\frac{1}{3}$ of 15 is 5 | $\frac{2}{3}$ of 15 is 10 |
| 3. | $\frac{1}{4}$ of 20 is 5 | $\frac{3}{4}$ of 20 is 15 |
| 4. | $\frac{1}{4}$ of 16 is 4 | $\frac{3}{4}$ of 16 is 12 |
| 5. | $\frac{1}{5}$ of 15 is 3 | $\frac{3}{5}$ of 15 is 9 |
| 6. | $\frac{1}{5}$ of 20 is 4 | $\frac{2}{5}$ of 20 is 8 |
| 7. | $\frac{1}{8}$ of 16 is 2 | $\frac{5}{8}$ of 16 is 10 |
| 8. | $\frac{1}{8}$ of 40 is 5 | $\frac{3}{8}$ of 40 is 15 |
| 9. | $\frac{1}{4}$ of 32 is 8 | $\frac{3}{4}$ of 32 is 24 |
| 10. | $\frac{1}{10}$ of 80 is 8 | $\frac{3}{10}$ of 80 is 24 |
| 11. | $\frac{1}{6}$ of 12 is 2 | $\frac{5}{6}$ of 12 is 10 |
| 12. | $\frac{1}{6}$ of 30 is 5 | $\frac{5}{6}$ of 30 is 25 |

Day 2 Y4 Fact webs Sheet 3

70

$\frac{1}{10}$ is 7

$\frac{2}{10}$ is 14

$\frac{3}{10}$ is 21

$\frac{4}{10}$ is 28

$\frac{5}{10}$ is 35

$\frac{6}{10}$ is 42

$\frac{7}{10}$ is 49

$\frac{8}{10}$ is 56

$\frac{9}{10}$ is 63

$\frac{10}{10}$ is 70

$\frac{1}{5}$ is 14

$\frac{2}{5}$ is 28

$\frac{3}{5}$ is 42

$\frac{4}{5}$ is 56

$\frac{5}{5}$ is 70

54

$\frac{1}{6}$ is 9

$\frac{2}{6}$ is 18

$\frac{3}{6}$ is 27

$\frac{4}{6}$ is 36

$\frac{5}{6}$ is 45

$\frac{6}{6}$ is 54

$\frac{1}{3}$ is 18

$\frac{1}{2}$ is 27

$\frac{2}{3}$ is 36

96

$\frac{1}{8}$ is 12

$\frac{2}{8}$ is 24

$\frac{3}{8}$ is 36

$\frac{4}{8}$ is 48

$\frac{5}{8}$ is 60

$\frac{6}{8}$ is 72

$\frac{7}{8}$ is 84

$\frac{8}{8}$ is 96

$\frac{1}{4}$ is 24

$\frac{2}{4}$ is 48

$\frac{3}{4}$ is 72

84

$\frac{1}{12}$ is 7

$\frac{2}{12}$ is 14

$\frac{3}{12}$ is 21

$\frac{4}{12}$ is 28

$\frac{5}{12}$ is 35

$\frac{6}{12}$ is 42

$\frac{7}{12}$ is 49

$\frac{8}{12}$ is 56

$\frac{9}{12}$ is 63

$\frac{10}{12}$ is 70

$\frac{11}{12}$ is 77

$\frac{12}{12}$ is 84

$\frac{1}{6}$ is 14

$\frac{2}{6}$ is 28

$\frac{3}{6}$ is 42

$\frac{4}{6}$ is 56

$\frac{5}{6}$ is 70

Challenge

Fractions and decimals

Answers

Day 2 Y4 Find fractions of amounts Sheet 4

- $\frac{1}{3}$ of 21 is **7** $\frac{2}{3}$ of 21 is **14**
- $\frac{1}{10}$ of 90 is **9** $\frac{7}{10}$ of 90 is **63**
- $\frac{1}{6}$ of 30 is **5** $\frac{5}{6}$ of 30 is **25**
- $\frac{1}{4}$ of 48 is **12** $\frac{3}{4}$ of 48 is **36**
- $\frac{1}{7}$ of 35 is **5** $\frac{3}{7}$ of 35 is **15**
- $\frac{1}{8}$ of 48 is **6** $\frac{5}{8}$ of 48 is **30**
- $\frac{1}{5}$ of 40 is **8** $\frac{4}{5}$ of 40 is **32**
- $\frac{1}{9}$ of 27 is **3** $\frac{4}{9}$ of 27 is **12**

Day 2 Y4 Find fractions of amounts Sheet 5

- $\frac{2}{3}$ of 27 is **18**
- $\frac{7}{10}$ of 90 is **63**
- $\frac{5}{6}$ of 42 is **35**
- $\frac{3}{4}$ of 48 is **36**
- $\frac{3}{7}$ of 35 is **15**
- $\frac{5}{8}$ of 48 is **30**
- $\frac{4}{5}$ of 55 is **44**
- $\frac{4}{9}$ of 27 is **12**
- $\frac{5}{7}$ of 56 is **40**
- $\frac{3}{9}$ of 81 is **27**

Challenge

Find the missing numbers:

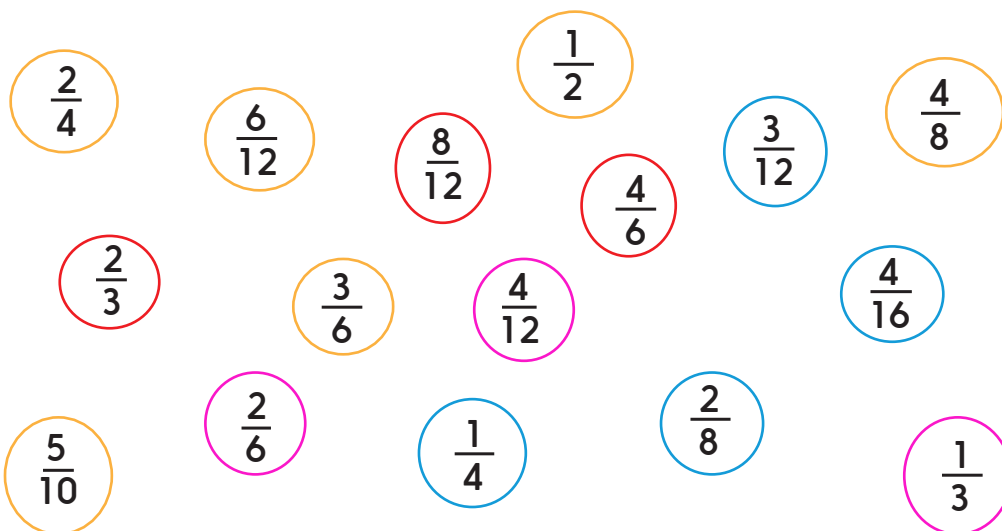
$$\frac{7}{10} \text{ of } 10 = 7$$

$$\frac{3}{8} \text{ of } 32 = 12$$

$$\frac{5}{7} \text{ of } 77 = 55$$

$$\frac{5}{5} \text{ of } 16 = 16$$

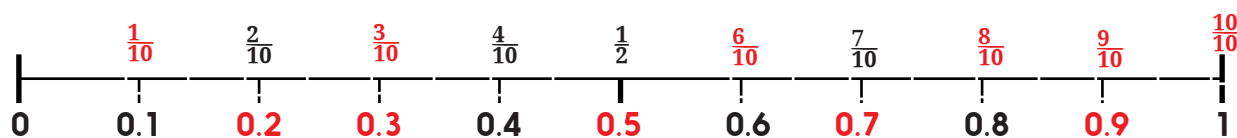
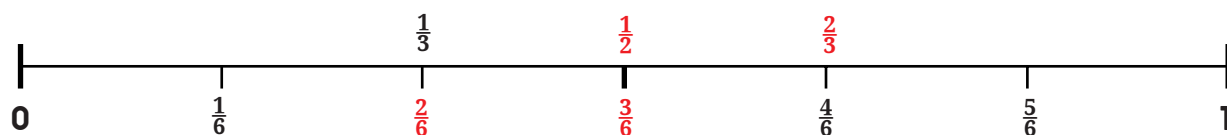
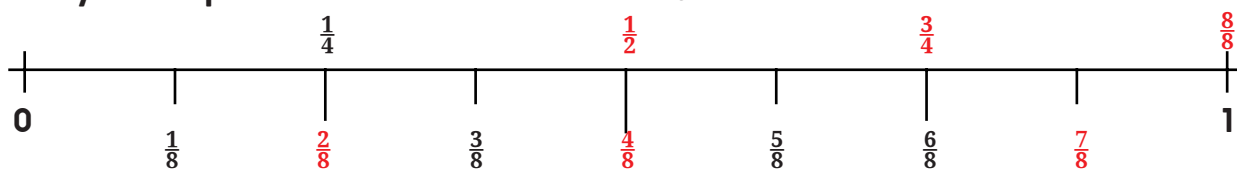
Day 3 Y3 Finding equivalent fractions Sheet 1



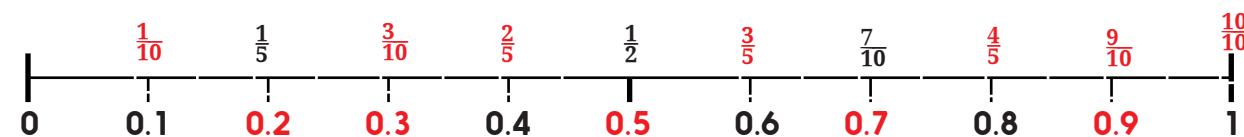
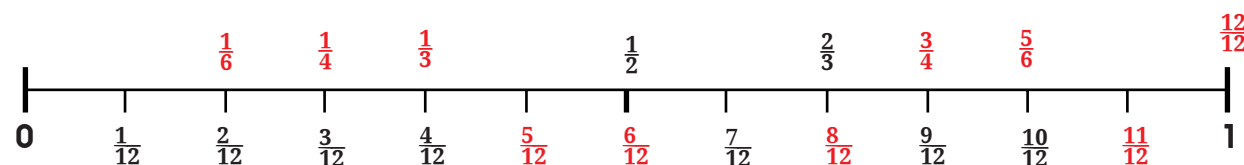
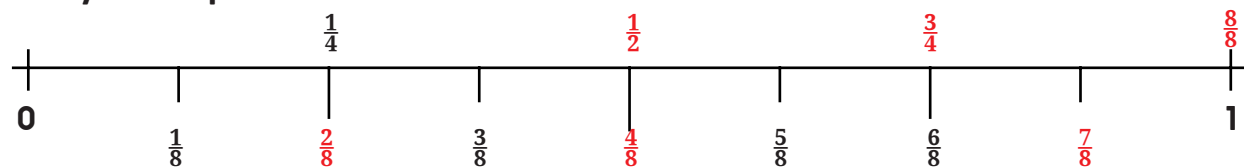
Fractions and decimals

Answers

Day 3 Y4 Equivalent fractions and decimals Sheet 2



Day 3 Y4 Equivalent fractions and decimals Sheet 3



Day 4 Y3 Finding tenths Sheet 1

1. $\frac{1}{10}$ of 50 = 5
2. $\frac{4}{10}$ of 50 = 20
3. $\frac{9}{10}$ of 50 = 45
4. $\frac{2}{10}$ of 80 = 16
5. $\frac{6}{10}$ of 80 = 48
6. $\frac{5}{10}$ of 40 = 20
7. $\frac{8}{10}$ of 60 = 48
8. $\frac{7}{10}$ of 70 = 49
9. $\frac{3}{10}$ of 90 = 27
10. $\frac{9}{10}$ of 100 = 90

Challenge

$\frac{3}{10}$ of 50 = 15
 The number was 80, $\frac{2}{10}$ of 80 is 16.
 $\frac{6}{10}$ of 60 = 36.

Fractions and decimals

Answers

Day 4 Y4 Equivalent fraction and decimals Sheet 2

$$\frac{20}{100} = \frac{2}{10} = \frac{1}{5} = 0.2$$

$$\frac{10}{100} = \frac{1}{10} = 0.1$$

$$\frac{50}{100} = \frac{5}{10} = \frac{1}{2} = 0.5$$

$$\frac{40}{100} = \frac{4}{10} = \frac{2}{5} = 0.4$$

$$\frac{80}{100} = \frac{8}{10} = \frac{4}{5} = 0.8$$

$$\frac{7}{100} = 0.07$$

$$\frac{25}{100} = \frac{1}{4} = 0.25$$

$$\frac{75}{100} = \frac{3}{4} = 0.75$$

$$\frac{90}{100} = \frac{9}{10} = 0.9$$

$$\frac{99}{100} = 0.99$$

Day 5 Y3 Adding and subtracting fractions Sheet 1

1. $\frac{2}{6} + \frac{3}{6} = \frac{5}{6}$

2. $\frac{4}{6} - \frac{2}{6} = \frac{2}{6}$

3. $\frac{1}{6} + \frac{4}{6} = \frac{5}{6}$

4. $\frac{4}{8} + \frac{3}{8} = \frac{7}{8}$

5. $\frac{7}{8} - \frac{4}{8} = \frac{3}{8}$

6. $\frac{5}{8} + \frac{2}{8} = \frac{7}{8}$

7. $\frac{5}{10} + \frac{3}{10} = \frac{8}{10}$

8. $\frac{4}{10} + \frac{4}{10} = \frac{8}{10}$

9. $\frac{8}{10} - \frac{6}{10} = \frac{2}{10}$

10. $\frac{6}{10} - \frac{5}{10} = \frac{1}{10}$

Challenge 1

2. $\frac{4}{6} - \frac{2}{6} = \frac{2}{6} = \frac{1}{3}$

7. $\frac{5}{10} + \frac{3}{10} = \frac{8}{10} = \frac{4}{5}$

8. $\frac{4}{10} + \frac{4}{10} = \frac{8}{10} = \frac{4}{5}$

9. $\frac{8}{10} - \frac{6}{10} = \frac{2}{10} = \frac{1}{5}$

Challenge 2

e.g. $\frac{4}{12} + \frac{4}{12} = \frac{8}{12} = \frac{4}{6}$
 $\frac{6}{8} = \frac{3}{4} = \frac{3}{4}$

Fractions and decimals

Answers

Day 5 Y4 Fraction word problems Sheet 2

1. Firstly find $\frac{1}{4}$ of 24 by dividing by 4: $24 \div 4 = 6$
Then, multiply this number by 3 to find $\frac{3}{4}$: $6 \times 3 = 18$
Therefore, $\frac{3}{4}$ of 24 is 18.
2. If Davina has walked $\frac{1}{4}$ of the way.
 $\frac{1}{4}$ of 28 is 7. Davina has walked 7 miles so far.
3. $\frac{1}{4}$ of 48 is 12, so the children's charity get $\frac{1}{2}$ or $\frac{2}{4}$ of the money, £24.
The animal charity gets $\frac{1}{4}$ of the money, £12.
The remaining $\frac{1}{4}$ of the money goes to school funds, £12.
4. $\frac{1}{3}$ of 60 is 20, so $\frac{1}{3}$ of the money, £20, goes to school funds, which leaves $\frac{2}{3}$ or £40 for the children's charity.
5. If they have gone $\frac{1}{10}$ of the way, they have gone 9 miles. $90 - 9 = 81$ so they have 81 miles to go.
6. $\frac{1}{4}$ of 20 is 5 so Faith has spent £5 on the book, £5 on presents for her friends and that leaves $\frac{2}{4}$ (or $\frac{1}{2}$), £10 that she has spent on ice creams!
7. $\frac{1}{2}$ of 20 is 10 and $\frac{1}{4}$ of 20 is 5 so the first child has eaten 10 chocolate buttons, the second child has eaten 5 chocolate buttons. There are $\frac{1}{4}$ of the buttons left on the cake so there are 5 buttons left on the cake.
8. $\frac{1}{2}$ of 48 is 24 so the first child eats 24 buttons, the second child eats 24 buttons and there is no cake left!

Day 5 Y4 Fraction word problems Sheet 3

1. Firstly find $\frac{1}{8}$ of 80 by dividing by 8: $80 \div 8 = 10$
Then, multiply this number by 5 to find $\frac{5}{8}$: $10 \times 5 = 50$
Therefore, $\frac{5}{8}$ of 80 is 50.
2. If Davina has walked $\frac{1}{4}$ of the way, she needs to walk $\frac{3}{4}$.
 $\frac{1}{4}$ of 28 is 7, so $\frac{3}{4}$ of 28 is 21. Davina has 21 miles further to go.
3. $\frac{1}{4}$ of 72 is 18, so the children's charity get $\frac{1}{2}$ or $\frac{2}{4}$ of the money, £36.
The animal charity gets $\frac{1}{4}$ of the money, £18.
The remaining $\frac{1}{4}$ of the money goes to school funds, £18.
4. $\frac{1}{7}$ of 63 is 9, so $\frac{2}{7}$ of the money, £18, goes to school funds. $\frac{3}{7}$ of the money, £27, goes to a children's charity, which leaves $\frac{2}{7}$ or £18 for the animal charity.
5. If they have gone $\frac{1}{10}$ of the way, they have gone 24 miles. $240 - 24 = 216$ so they have 216 miles to go.
6. $\frac{1}{5}$ of 25 is 5 so Faith has spent £5 on the book, £10 on presents for her friends and that leaves $\frac{2}{5}$ or £10 that she has spent on ice creams!
7. $\frac{1}{6}$ of 42 is 7 so the first child has eaten 7 chocolate buttons. The second child has eaten $\frac{1}{3}$, which is the same as $\frac{2}{6}$ so they have eaten 14 chocolate buttons. There are $\frac{3}{6}$ of the buttons left on the cake so there are 21 buttons left on the cake.
8. $\frac{1}{8}$ of 48 is 6 so the first child eats 6 buttons, the very hungry child eats 30 buttons and there are $\frac{2}{8}$ left, so 12 buttons are left on the cake.