

# Yr 4 Decimals and fractions Unit 5 (4871)

## Additional teacher instructions for practice sheets

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

### Day 1 Equivalent fractions and decimals Sheet 1

Working towards ARE

### Day 1 Equivalent fractions and decimals Sheet 2

Working at ARE / Greater Depth

If Greater Depth children finish, challenge them to add another fraction or decimal between each of those already there on the tenths number line.

### Day 2 Fact webs Sheet 1

Working towards ARE

### Day 2 Find fractions of amounts Sheet 2

Working at ARE

### Day 2 Find fractions of amounts Sheet 3

Greater Depth

### Day 3 Fraction word problems Sheet 1

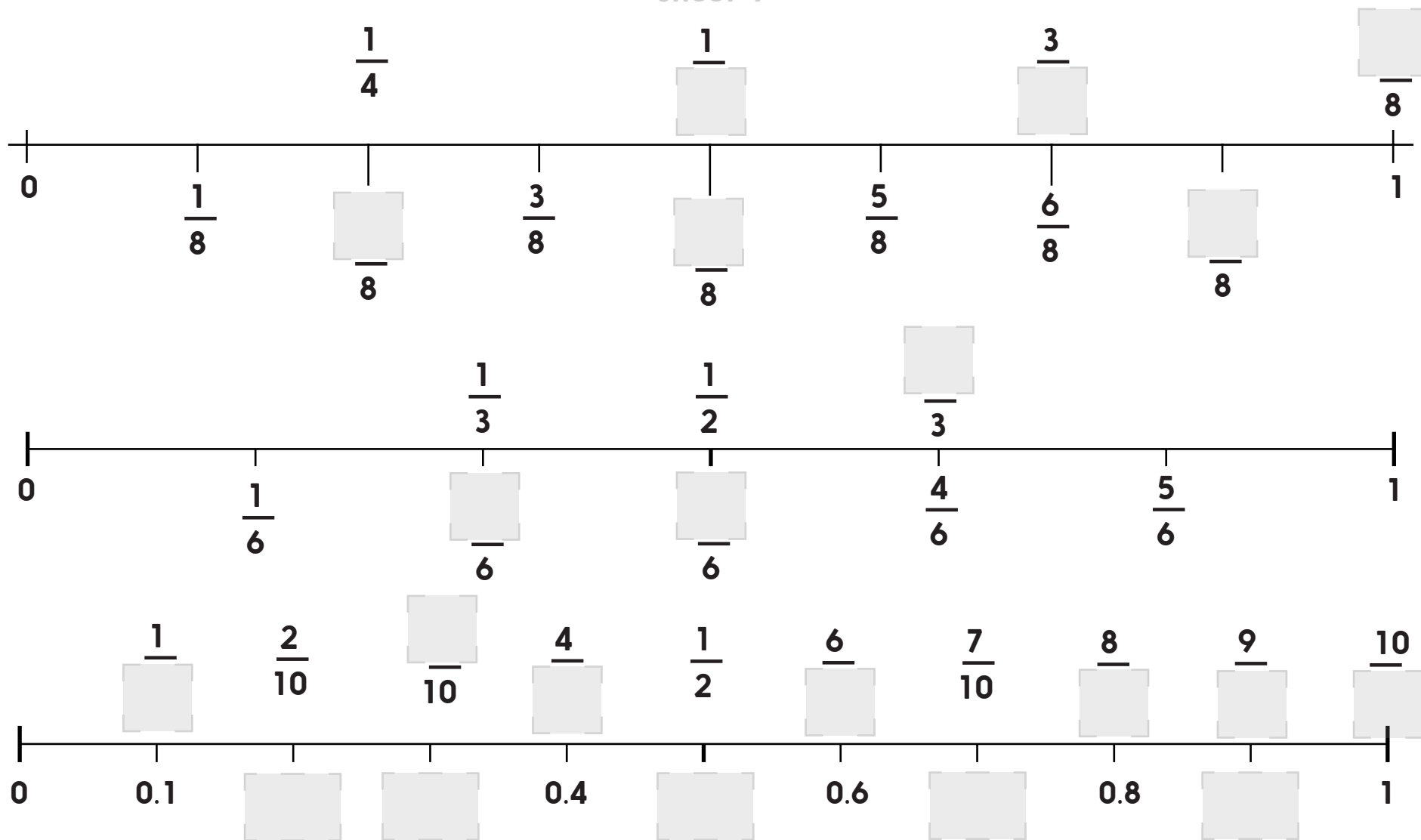
Working towards ARE

### Day 3 Fraction word problems Sheet 2

Working at ARE / Greater Depth

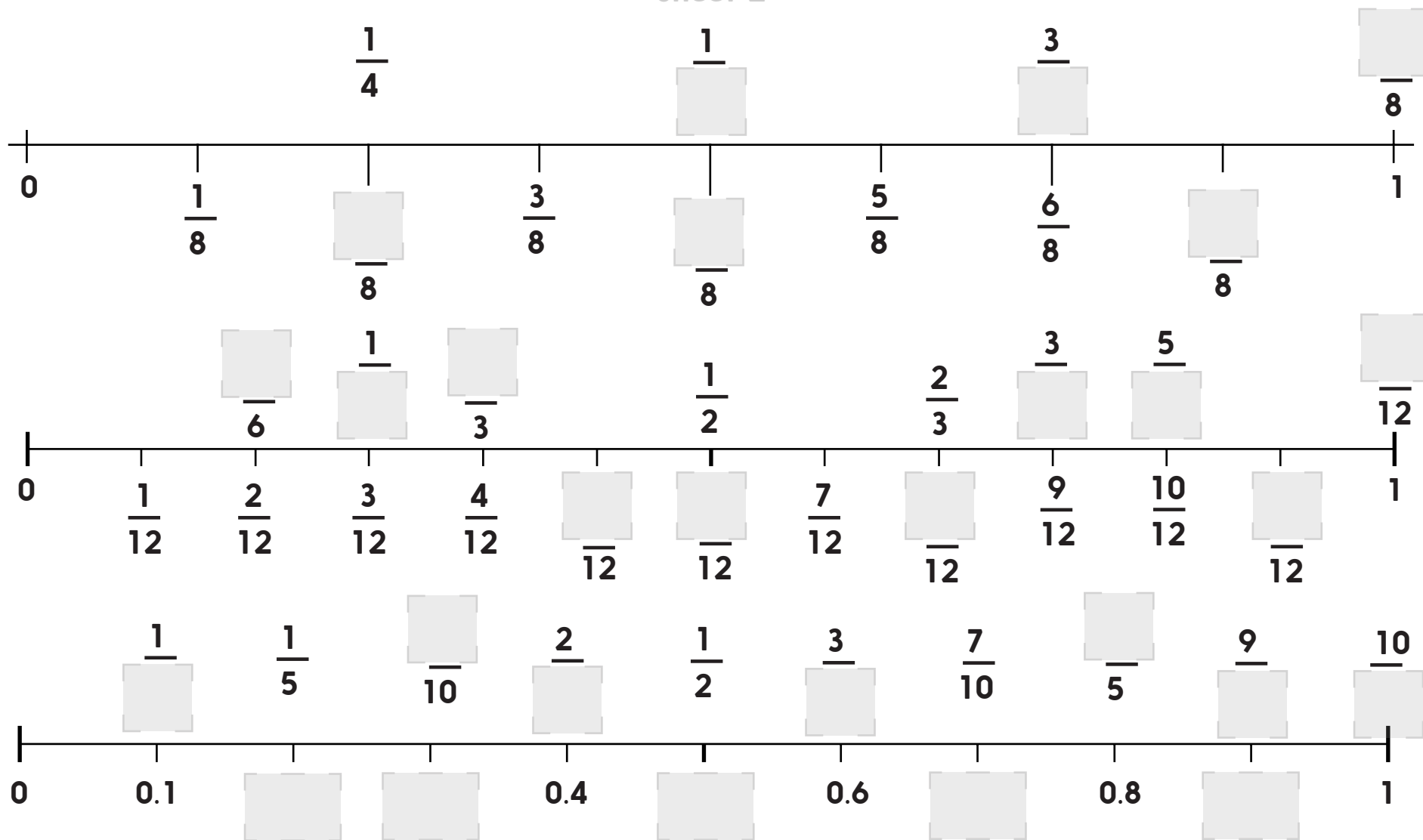
# Equivalent fractions and decimals

## Sheet 1



# Equivalent fractions and decimals

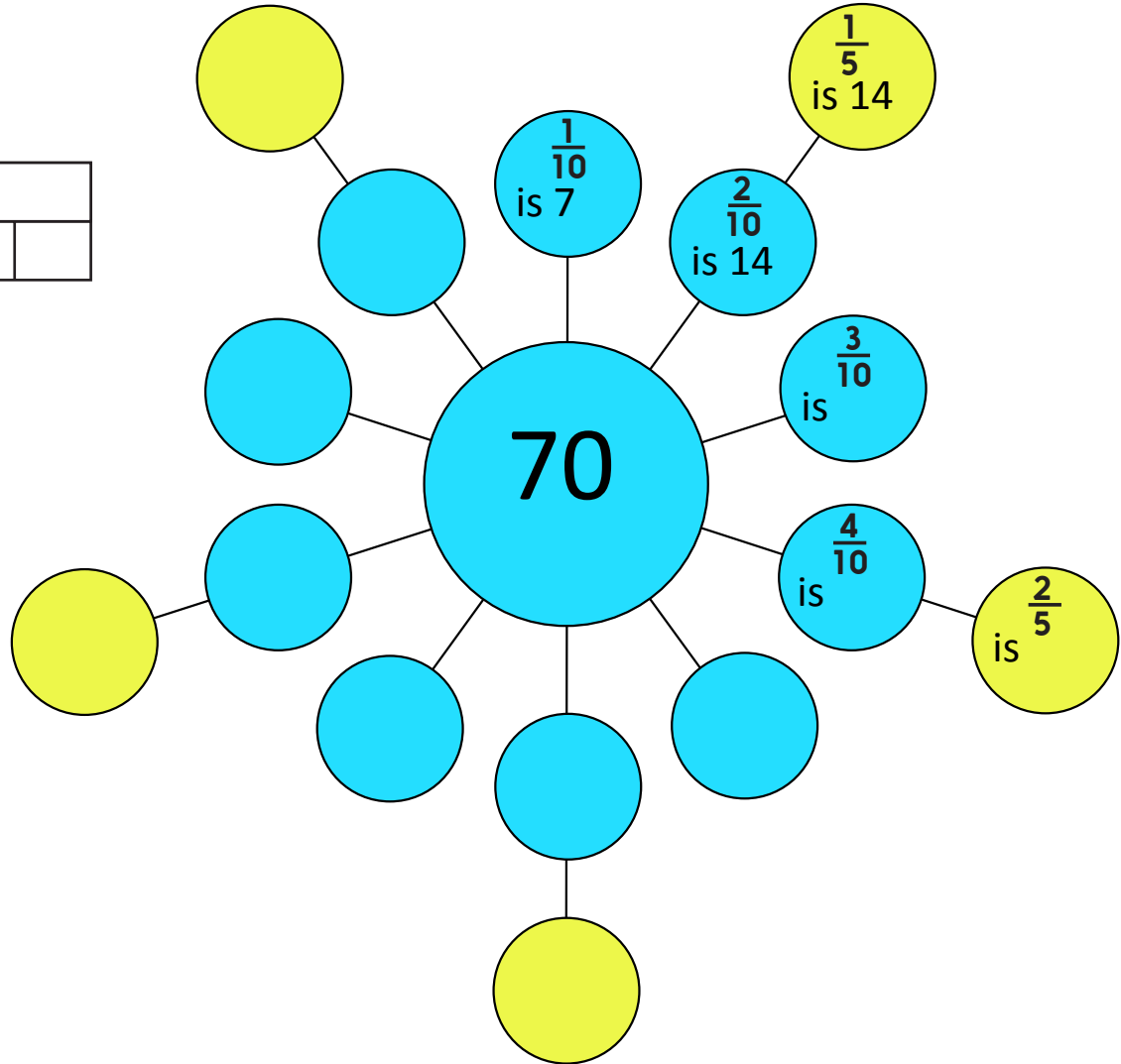
## Sheet 2



# Fact webs

## Sheet 1

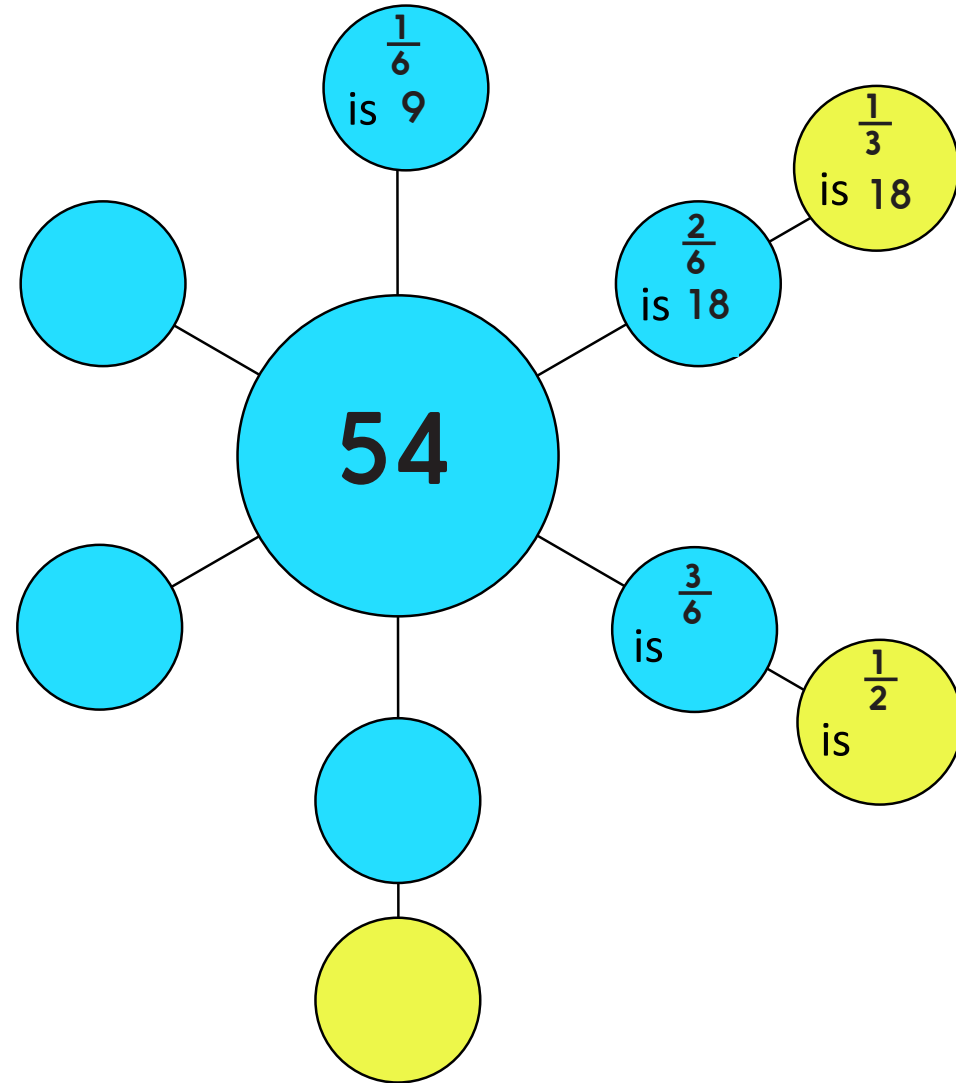
70									



# Fact webs

Sheet 1 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 2

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 3

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:

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

$\frac{3}{\quad}$  of 32 = 12

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

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

# Fraction word problems

## Sheet 1

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

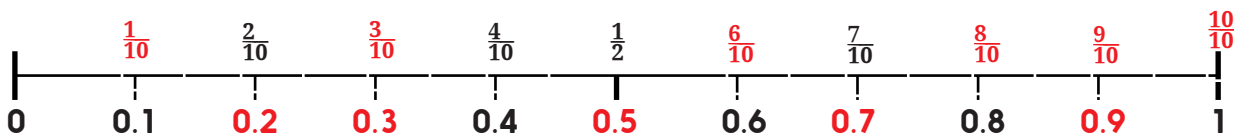
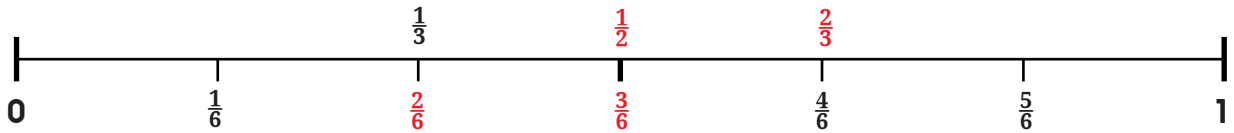
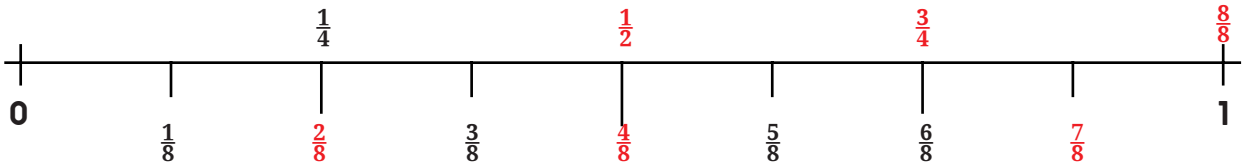
## Sheet 2

<p>1. David is trying to remember how to find <math>\frac{5}{8}</math> of 80. Write instructions to help him.</p>	<p>2. Davina is walking 28 miles for charity. So far she has walked <math>\frac{1}{4}</math> of the way, how much further does she have to go?</p>
<p>3. A class raise £72 by selling badges. They give <math>\frac{1}{2}</math> to a children's charity, <math>\frac{1}{4}</math> 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 <math>\frac{2}{7}</math> to school funds and <math>\frac{3}{7}</math> 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 <math>\frac{1}{10}</math> 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 <math>\frac{1}{5}</math> of the money on a book, <math>\frac{2}{5}</math> 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 <math>\frac{1}{6}</math> of the cake, and another child eats <math>\frac{1}{3}</math> 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 <math>\frac{1}{8}</math> and one very hungry child eats <math>\frac{5}{8}</math> of the cake. How many chocolate buttons do they each eat? How many buttons are left on the cake?</p>

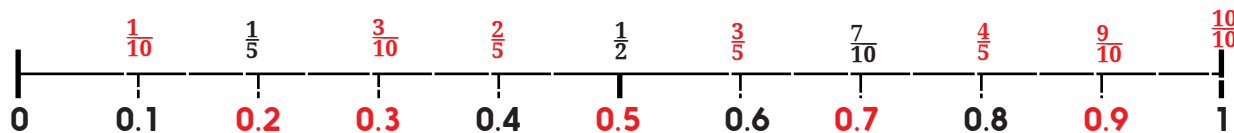
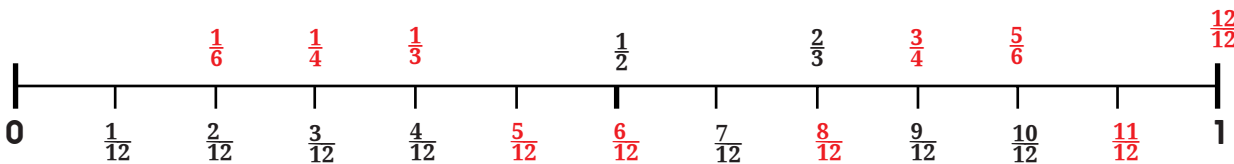
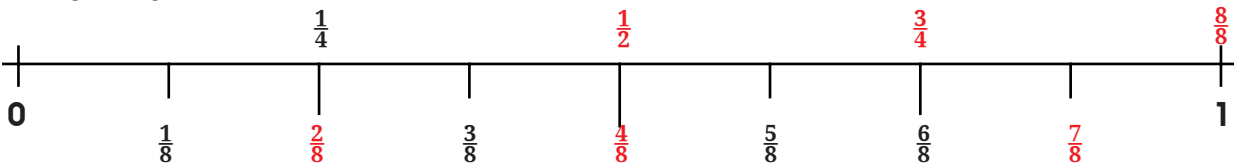
# Decimals and fractions

## Answers

### Day 1 Equivalent fractions and decimals Sheet 1



### Day 1 Equivalent fractions and decimals Sheet 2



### Day 2 Fact webs Sheet 1

**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

### Challenge

**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

# Decimals and fractions

## Answers

### Day 2 Find fractions of amounts Sheet 2

- $\frac{1}{3}$  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 Find fractions of amounts Sheet 3

- $\frac{2}{3}$  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:

$$\frac{\boxed{7}}{10}$$

of 10 = 7

$$\frac{\boxed{3}}{\boxed{8}}$$

of 32 = 12

$$\frac{5}{7}$$

of  $\boxed{77}$  = 55

$$\frac{\boxed{5}}{\boxed{5}}$$

of 16 = 16

### Day 3 Fraction word problems Sheet 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.
- If Davina has walked  $\frac{1}{4}$  of the way.  
 $\frac{1}{4}$  of 28 is 7. Davina has walked 7 miles so far.
- $\frac{1}{4}$  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.
- $\frac{1}{3}$  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.
- 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.
- $\frac{1}{4}$  of 20 is 5 so Faith has spent £5 on the book, £5 on presents for her friends and that leaves  $\frac{3}{4}$  (or  $\frac{1}{2}$ ), £10 that she has spent on ice creams!
- $\frac{1}{2}$  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.
- $\frac{1}{2}$  of 48 is 24 so the first child eats 24 buttons, the second child eats 24 buttons and there is no cake left!

# Decimals and fractions

## Answers

### Day 3 Fraction word problems Sheet 2

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.