

**TARGET** To count up and down in tenths.

**Examples**

Start at  $\frac{5}{10}$ . Count on  $\frac{3}{10}$ .

$\frac{5}{10}, \frac{6}{10}, \frac{7}{10}, \frac{8}{10}$

Answer  $\frac{8}{10}$

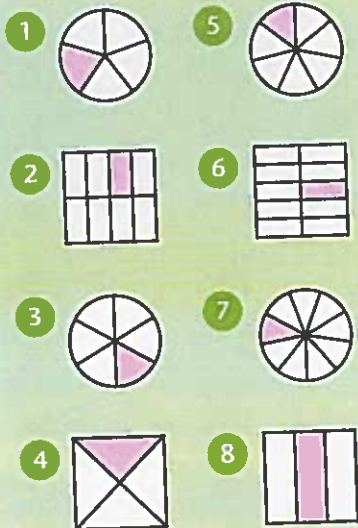
Start at 1. Count back  $\frac{4}{10}$ .

$1 = \frac{10}{10}, \frac{9}{10}, \frac{8}{10}, \frac{7}{10}, \frac{6}{10}$

Answer  $\frac{6}{10}$

**A**

What fraction of each shape is shaded?

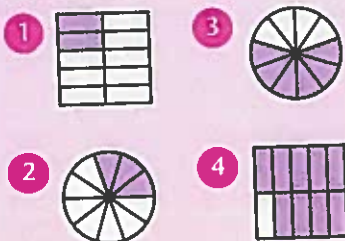


- 9 Start at 0.  
Count in halves to 3.
- 10 Start at 5.  
Count on in quarters to 7.
- 11 Start at 10.  
Count back in halves to 6.
- 12 Start at  $1\frac{3}{4}$ .  
Count back in quarters to 0.

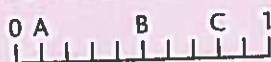
**B**

Write the fraction shown:

- a) in words
- b) in figures.



- 5 Write the fraction shown by each letter:
- a) in words
- b) in figures.



Count on or back in tenths.

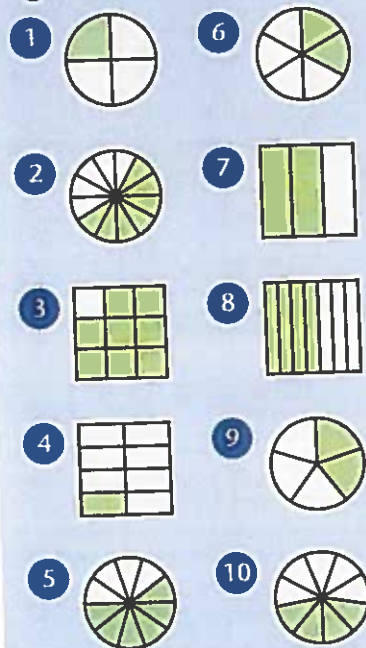
- 6 Start at two tenths.  
Count on four tenths.
- 7 Start at seven tenths.  
Count back three tenths.
- 8 Start at three tenths.  
Count on six tenths.
- 9 Start at one.  
Count back seven tenths.
- 10 Start at one tenth.  
Count on nine tenths.

**C**

What fraction of each diagram is:

- a) green
- b) white?

Write your answer in both figures and words.



Write the first six numbers.

- 11 Start at 0.  
Count on in eighths.
- 12 Start at 1.  
Count back in ninths.
- 13 Start at three twelfths.  
Count on in twelfths.
- 14 Start at 1.  
Count back in sixths.

Tuesday 4/3

## FRACTIONS OF A SET 2

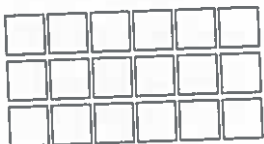
65

**TARGET** To find fractions of a set of objects and amounts.

**Examples**

$$\frac{1}{3} \text{ of } 18 = 6$$

$$\frac{2}{3} \text{ of } 18 = 12$$



$$\frac{1}{6} \text{ of } 18 = 3$$

$$\frac{5}{6} \text{ of } 18 = 15$$

$$\frac{1}{4} \text{ of } 40 = 40 \div 4 = 10$$

$$\frac{3}{4} \text{ of } 40 = (40 \div 4) \times 3 = 10 \times 3 = 30$$

**A**

Use the squares to help you find:

1  $\frac{1}{2}$  of 6

2  $\frac{1}{3}$  of 6

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

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

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

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

7  $\frac{1}{4}$  of 12

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

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

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

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

12  $\frac{1}{6}$  of 24

13  $\frac{1}{2}$  of 24

Find

14  $\frac{1}{2}$  of 18

15  $\frac{1}{3}$  of 9

16  $\frac{1}{5}$  of 10

17  $\frac{1}{10}$  of 100

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

19  $\frac{1}{6}$  of 30

**B**

Look at the squares in Section A. Work out

1 a)  $\frac{1}{3}$  of 6

b)  $\frac{2}{3}$  of 6

2 a)  $\frac{1}{5}$  of 15

b)  $\frac{3}{5}$  of 15

3 a)  $\frac{1}{4}$  of 12

b)  $\frac{3}{4}$  of 12

4 a)  $\frac{1}{5}$  of 20

b)  $\frac{4}{5}$  of 20

5 a)  $\frac{1}{6}$  of 24

b)  $\frac{5}{6}$  of 24

6 a)  $\frac{1}{3}$  of 24

b)  $\frac{2}{3}$  of 24

Find  $\frac{1}{3}$  of:

7 30

8 25

9 50

10 35

Find  $\frac{1}{3}$  of:

11 18

12 60

13 36

14 27

Find  $\frac{1}{4}$  of:

15 8

16 16

17 28

18 36

Find  $\frac{1}{10}$  of:

19 40

20 120

21 300

22 750

**C**

Find

1  $\frac{3}{4}$  of 24

2  $\frac{2}{3}$  of 21

3  $\frac{4}{5}$  of 45

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

5  $\frac{7}{10}$  of 60

6  $\frac{5}{8}$  of 32

7  $\frac{3}{10}$  of 200

8  $\frac{2}{3}$  of 60

9  $\frac{3}{4}$  of 100

10  $\frac{2}{5}$  of 100

11  $\frac{9}{10}$  of 500

12  $\frac{1}{100}$  of 1000

13 There are 30 children in a class. Nine tenths are present. How many children are absent?

14 There are 24 bottles in a crate. Two thirds are empty. How many bottles are not empty?

15 There are 56 pills in a packet. Three eighths have been taken. How many are left?



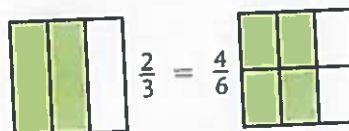
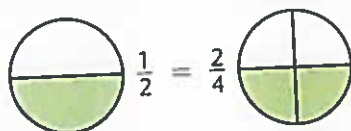
# EQUIVALENT FRACTIONS 1

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**TARGET** To recognise and show equivalent fractions.

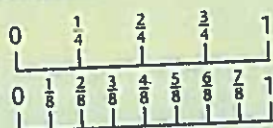
Equivalent fractions are fractions that look different but are the same.

Examples



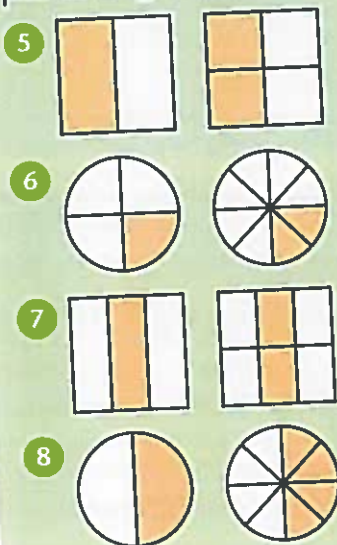
**A**

Use the number lines to complete the equivalent fractions.



- 1  $\frac{1}{4} = \frac{\square}{8}$     3  $\frac{3}{4} = \frac{\square}{8}$   
 2  $\frac{1}{2} = \frac{\square}{8}$     4  $\frac{2}{4} = \frac{\square}{8}$

Write the equivalent fractions shown in each pair of diagrams.

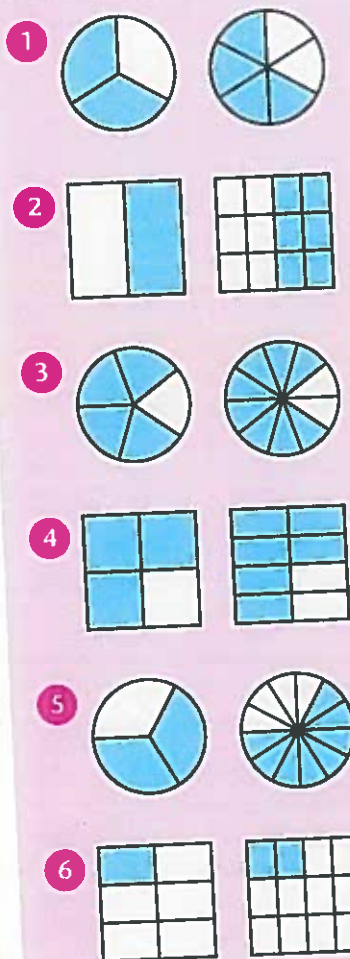


Draw a pair of diagrams to show:

- 9  $\frac{1}{2} = \frac{5}{10}$     11  $\frac{1}{2} = \frac{3}{6}$   
 10  $\frac{1}{3} = \frac{3}{9}$     12  $\frac{3}{4} = \frac{6}{8}$

**B**

Write the equivalent fractions shown in each pair of diagrams.



Draw a pair of diagrams to show:

- 7  $\frac{3}{4} = \frac{9}{12}$     9  $\frac{2}{5} = \frac{4}{10}$   
 8  $\frac{2}{3} = \frac{6}{9}$     10  $\frac{5}{6} = \frac{10}{12}$

**C**

Copy and complete.

- 1  $\frac{1}{2} = \frac{\square}{6}$     7  $\frac{3}{5} = \frac{\square}{100}$   
 2  $\frac{3}{4} = \frac{\square}{16}$     8  $\frac{9}{10} = \frac{\square}{50}$   
 3  $\frac{4}{5} = \frac{\square}{10}$     9  $\frac{2}{7} = \frac{\square}{14}$   
 4  $\frac{7}{10} = \frac{\square}{100}$     10  $\frac{3}{4} = \frac{\square}{20}$   
 5  $\frac{2}{3} = \frac{\square}{15}$     11  $\frac{11}{25} = \frac{\square}{100}$   
 6  $\frac{3}{8} = \frac{\square}{16}$     12  $\frac{2}{3} = \frac{\square}{18}$

Write the next five fractions in these chains.

- 13  $\frac{1}{2} = \frac{2}{4} = \frac{3}{6}$   
 14  $\frac{1}{3} = \frac{2}{6} = \frac{3}{9}$   
 15  $\frac{3}{4} = \frac{6}{8} = \frac{9}{12}$   
 16  $\frac{2}{5} = \frac{4}{10} = \frac{6}{15}$

Write >, < or = in each box.

- 17  $\frac{1}{2} \square \frac{6}{10}$     21  $\frac{1}{3} \square \frac{2}{9}$   
 18  $\frac{2}{3} \square \frac{3}{6}$     22  $\frac{2}{6} \square \frac{4}{12}$   
 19  $\frac{2}{5} \square \frac{4}{10}$     23  $\frac{1}{2} \square \frac{5}{12}$   
 20  $\frac{1}{4} \square \frac{3}{16}$     24  $\frac{3}{8} \square \frac{7}{16}$

# EQUIVALENT FRACTIONS 2

68

**TARGET** To recognise and show equivalent fractions.

**Example**

Write the fraction shown in two different ways.



$$\frac{1}{2} = \frac{6}{12}$$

**A**

Write the fraction of each shape which is shaded?

1



5



2



6



3



7



4



8



Copy and complete by writing  $\frac{1}{2}$  or  $\frac{1}{4}$  in the box.

9



$$\frac{6}{12} = \boxed{\phantom{00}}$$

10



$$\frac{2}{8} = \boxed{\phantom{00}}$$

11



$$\frac{4}{8} = \boxed{\phantom{00}}$$

12



$$\frac{3}{12} = \boxed{\phantom{00}}$$

**B**

Copy and complete the equivalent fractions.

1



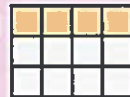
$$\frac{\phantom{00}}{10} = \frac{1}{5}$$

2



$$\frac{\phantom{00}}{6} = \frac{1}{3}$$

3



$$\frac{4}{12} = \frac{1}{\phantom{00}}$$

4



$$\frac{4}{8} = \frac{1}{\phantom{00}}$$

Write the fraction shown in two different ways.

5



7



6



8



9 Draw a diagram to show each pair of equivalent fractions.

a)  $\frac{1}{3} = \frac{3}{9}$

b)  $\frac{1}{2} = \frac{6}{12}$

c)  $\frac{1}{6} = \frac{2}{12}$

**C**

Copy and complete the equivalent fractions.

1



$$\frac{6}{8} = \frac{\phantom{00}}{4}$$

2



$$\frac{6}{9} = \frac{\phantom{00}}{3}$$

3



$$\frac{4}{10} = \frac{\phantom{00}}{5}$$

4



$$\frac{9}{12} = \frac{\phantom{00}}{4}$$

Write the fraction shown in two different ways.

5



7



6



8



9 Draw a diagram to show each pair of equivalent fractions.

a)  $\frac{3}{5} = \frac{6}{10}$

b)  $\frac{5}{6} = \frac{10}{12}$

c)  $\frac{3}{4} = \frac{9}{12}$