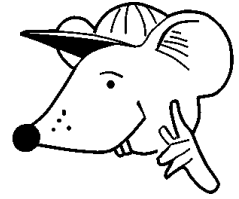


MATHEMATICS



N.S. Yr. 4 P.24

Find fractions of numbers or quantities.

Equipment

Paper, pencil, ruler

MathSphere

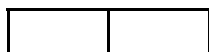
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Concepts

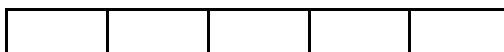
They should be able to count forwards or backwards in halves and quarters from small whole numbers such as 10 and they should be able to mark wholes, halves, quarters and eighths on a number line from 0 to 5.

Pupils should be able to find a simple fraction of a familiar quantity such as one tenth of 30 or 100 or 500 and one quarter of 8 or 12 or 20.

They should be able to find simple fractions of £1 and one metre and be able to say what fraction of a large shape is a smaller shape. For example, what fraction is shape A of shape B?



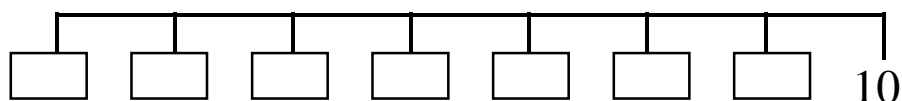
Shape A



Shape B

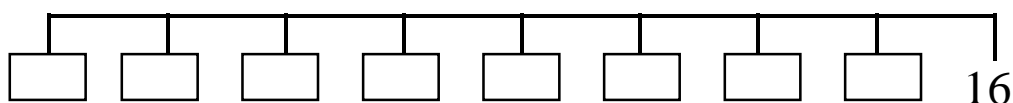
When tackling this type of problem, make sure each shape is divided into the same size sections. In this case there are five such sections in Shape B and two such sections in shape A, therefore Shape A is **the same as** $\frac{2}{5}$ of Shape B.

1.



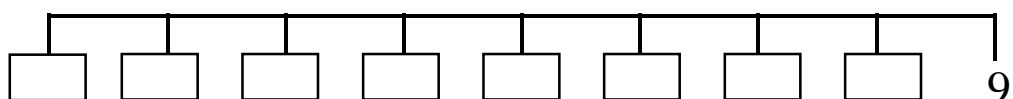
Count **backwards** from **10** in **halves** and write the numbers in the boxes.

2.



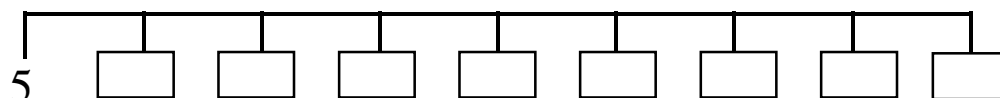
Count **backwards** from **16** in **halves** and write the numbers in the boxes.

3.



Count **backwards** from **9** in **quarters** and write the numbers in the boxes.

4.



Count **forwards** from **5** in **quarters** and write the numbers in the boxes.

5. Draw your own number line from **0** to **4** and put in all the **whole numbers**, all the **halves**, all the **quarters** and all the **eighths**.

You will find it easier if you put the **whole numbers** in first, then the **halves**, then the **quarters** and save the **eighths** until the end!!!!



Me again, folks. Good tip from my other half.



1. What is one **half** of these numbers?

a) 20 b) 24 c) 16 d) 50 e) 100 f) 200 g) 250

2. What is one **quarter** of these numbers?

a) 16 b) 32 c) 40 d) 100 e) 400 f) 200 g) 240

3. What is one **tenth** of these numbers?

a) 20 b) 30 c) 100 d) 70 e) 120 f) 350 g) 900

4. What is one **fifth** of these numbers?

a) 5 b) 15 c) 30 d) 90 e) 100 f) 45 g) 300

5. What is one **third** of these numbers?

a) 9 b) 21 c) 60 d) 33 e) 15 f) 24 g) 99

6. a) How many pennies are there in a pound?

b) What is one **tenth** of a pound?

c) What is one **half** of a pound?

d) What is one **quarter** of a pound?

7. a) How many centimetres are there in a metre?

b) What is one **tenth** of a metre?

c) What is one **half** of a metre?

d) What is one **quarter** of a metre?

8. a) What fraction of a pound is 50p ?

b) What fraction of a pound is 25p ?

c) What fraction of a metre is 25cm ?

d) What fraction of a metre is ten centimetres?

9. Which is greater, one fifth of a pound or one quarter of a pound?

10. Which is greater, one half of a metre or one quarter of a metre?

1. What is one **third** of these numbers?

- a) 33 b) 60 c) 36 d) 120 e) 45 f) 27 g) 90

2. What is one **tenth** of these numbers?

- a) 150 b) 540 c) 740 d) 90 e) 480 f) 800 g) 770

3. What is one **fifth** of these numbers?

- a) 15 b) 45 c) 75 d) 40 e) 100 f) 200 g) 105

4. What is one **half** of these numbers?

- a) 8 b) 26 c) 46 d) 88 e) 78 f) 44 g) 150

5. What is one **quarter** of these numbers?

- a) 12 b) 40 c) 160 d) 32 e) 48 f) 56 g) 92

6. a) How many pennies are there in a pound?

b) What is one **quarter** of a pound?

c) What is one **fifth** of a pound?

d) What is one **tenth** of a pound?

7. a) How many centimetres are there in a metre?

b) What is one **half** of a metre?

c) What is one **quarter** of a metre?

d) What is one **tenth** of a metre?

8. a) What fraction of a pound is 25p ?

b) What fraction of a pound is 30p ?

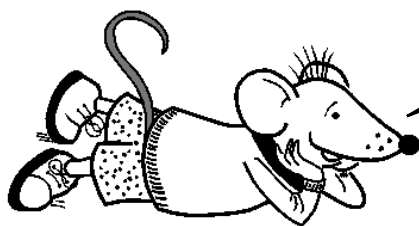
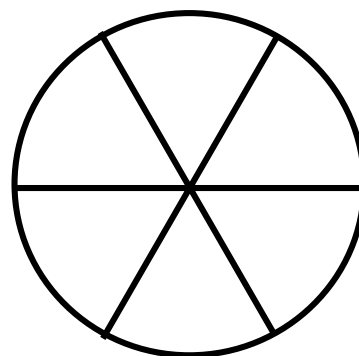
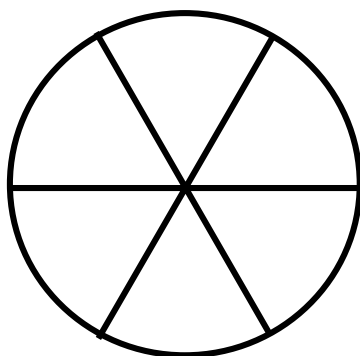
c) What fraction of a metre is 20cm ?

d) What fraction of a metre is fifty centimetres?

9. Which is greater, one half of a pound or one tenth of a pound?

10. Which is greater, one fifth of a metre or one quarter of a metre?

1. Find **one quarter** of 12.
2. What is **one fifth** of 30 ?
3. What is **one third** of 30 ?
4. A cake is shared equally between **six** people. How much of the cake do they have each?
5. Find **one quarter** of 16.
6. What is **one fifth** of 15 ?
7. What is **one third** of 18 ?
8. **Two** cakes are divided between **six** people. How much of a cake does each person have? This diagram may help you.

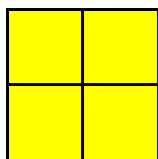


Piece of cake!

9. Three people share **two blocks of chocolate**. How much do they have each?

Start by drawing two blocks of chocolate and dividing each one into three equal pieces.

1. What fraction of Shape X is Shape Y ?

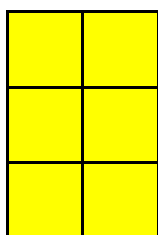


Shape X



Shape Y

2. What fraction of Shape X is Shape Y ?



Shape X

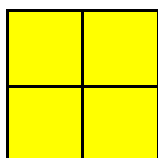


Shape Y

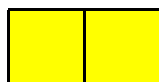
I'm in good shape!
Are you?



3. What fraction of Shape X is Shape Y ?

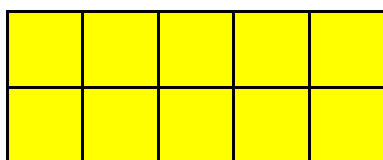


Shape X



Shape Y

4. What fraction of Shape X is Shape Y ?

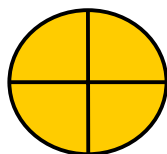


Shape X



Shape Y

1. What fraction of Shape X is Shape Y ?

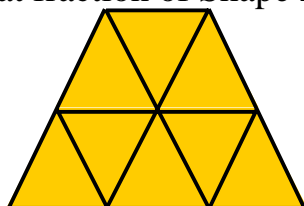


Shape X



Shape Y

2. What fraction of Shape X is Shape Y ?

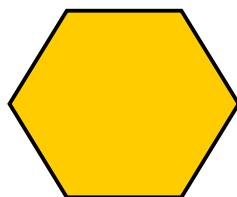


Shape X

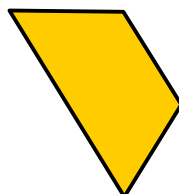


Shape Y

3. What fraction of Shape X is Shape Y ?

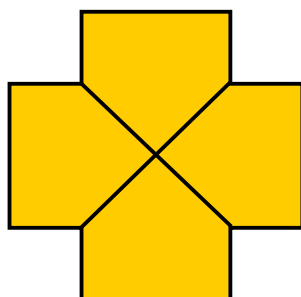


Shape X

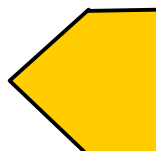


Shape Y

4. What fraction of Shape X is Shape Y ?



Shape X



Shape Y

This is **my**
favourite shape!



Answers

Page 3

1. $6\frac{1}{2}$, 7, $7\frac{1}{2}$, 8, $8\frac{1}{2}$, 9, $9\frac{1}{2}$, **10**
2. 12, $12\frac{1}{2}$, 13, $13\frac{1}{2}$, 14, $14\frac{1}{2}$, 15, $15\frac{1}{2}$, **16**
3. 7, $7\frac{1}{4}$, $7\frac{1}{2}$, $7\frac{3}{4}$, 8, $8\frac{1}{4}$, $8\frac{1}{2}$, $8\frac{3}{4}$, **9**
4. **5**, $5\frac{1}{4}$, $5\frac{1}{2}$, $5\frac{3}{4}$, 6, $6\frac{1}{4}$, $6\frac{1}{2}$, $6\frac{3}{4}$, **7**
5. Draw number line beginning: 0, $\frac{1}{8}$, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$ etc

Page 4

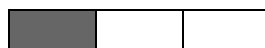
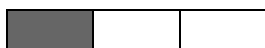
1. a) 10 b) 12 c) 8 d) 25 e) 50 f) 100 g) 125
2. a) 4 b) 8 c) 10 d) 25 e) 100 f) 50 g) 60
3. a) 2 b) 3 c) 10 d) 7 e) 12 f) 35 g) 90
4. a) 1 b) 3 c) 6 d) 18 e) 20 f) 9 g) 60
5. a) 3 b) 7 c) 20 d) 11 e) 5 f) 8 g) 33
6. a) 100 b) 10p c) 50p d) 25p
7. a) 100 b) 10 cm c) 50 cm d) 25 cm
8. a) $\frac{1}{2}$ b) $\frac{1}{4}$ c) $\frac{1}{4}$ d) $\frac{1}{10}$
9. Quarter of a pound
10. Half of a metre

Page 5

1. a) 11 b) 20 c) 12 d) 40 e) 15 f) 9 g) 30
2. a) 15 b) 54 c) 74 d) 9 e) 48 f) 80 g) 77
3. a) 3 b) 9 c) 15 d) 8 e) 20 f) 40 g) 21
4. a) 4 b) 13 c) 23 d) 44 e) 39 f) 22 g) 75
5. a) 3 b) 10 c) 40 d) 8 e) 12 f) 14 g) 23
6. a) 100 b) 25p c) 20p d) 10p
7. a) 100 b) 50 cm c) 25 cm d) 10 cm
8. a) $\frac{1}{4}$ b) $\frac{3}{10}$ c) $\frac{1}{5}$ or $\frac{2}{10}$ d) $\frac{1}{2}$
9. Half of a pound
10. Quarter of a metre

Page 6

1. 3 2. 6 3. 10 4. $\frac{1}{6}$ 5. 4 6. 3 7. 6
8. $\frac{2}{6}$ or $\frac{1}{3}$
9. $\frac{2}{3}$ of a block each.



Answers**Page 7**

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

Page 8

1. $\frac{1}{4}$ 2. $\frac{1}{8}$ 3. $\frac{1}{2}$ 4. $\frac{1}{4}$