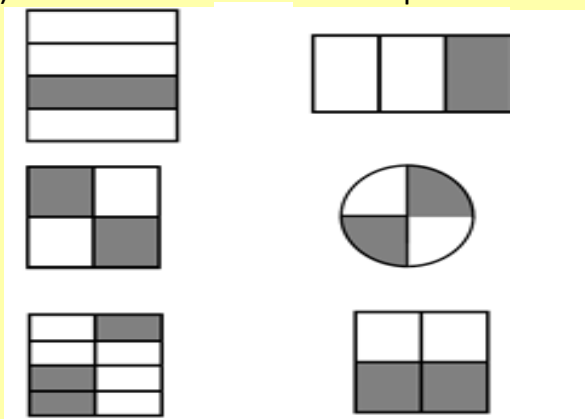


Don't try to work these out in your head if working out on paper helps – in fact, it's ALWAYS BEST to have a spare piece of paper anyway to do your working out on. Not even 'real' mathematicians and scientists think they must do tricky maths in their heads! (How do you think Einstein or Stephen Hawking did their work?!)

FRACTIONS OF AMOUNTS (Yellow to red: from easiest to trickiest)



1) What fraction of these shapes is shaded?



2) Use grids 2a, 2b, 2c and 2d provided. Shade fraction 2a onto grid 2a, etc.

a) $\frac{1}{4}$ b) $\frac{1}{2}$ c) $\frac{1}{12}$ d) $\frac{3}{4}$

3) Use the grids provided to work out all 6 fractions for a, b and c.

THEN CIRCLE WHICH FRACTION IN EACH PAIR IS BIGGER

a) $\frac{3}{8}$ or $\frac{1}{4}$ b) $\frac{3}{5}$ or $\frac{1}{2}$ c) $\frac{1}{3}$ or $\frac{3}{9}$

1) Find $\frac{1}{4}$ of these amounts:

a) 20 b) 40 c) 120 d) 36

2) Find the following fractions of 100:

a) $\frac{1}{2}$ b) $\frac{1}{4}$ c) $\frac{1}{10}$ d) $\frac{1}{5}$

3) I have £180 find:

a) $\frac{1}{6}$ of £180 b) $\frac{2}{6}$ of £180 c) $\frac{5}{6}$ of £180

4) Which is bigger? Find the fractions of the amounts to find out:

a) $\frac{3}{5}$ of 25 or $\frac{2}{3}$ of 18?

b) $\frac{4}{7}$ of 49 or $\frac{5}{6}$ of 36?

c) $\frac{3}{11}$ of 55 or $\frac{1}{3}$ of 45

5) Find $\frac{3}{7}$ of these amounts:

a) 14 b) 84 c) 700 d) 0.7

6) Which is bigger: $\frac{6}{10}$ of 70 or $\frac{3}{5}$ of 70?
Explain your answer.

1) In a school, $\frac{2}{5}$ of the students go to a sports club. There are 500 students in the school. How many students go to sports clubs?

2) In a year group of 60 pupils, $\frac{3}{4}$ like fruit juice, $\frac{1}{5}$ like cordial and $\frac{3}{10}$ like flavoured water. How many children like each drink?

3) Sam has a bag of 320 sweets. He eats $\frac{3}{5}$ of them. How many does he have left?

4) In class A there are 50 students and $\frac{4}{5}$ of them like maths. In class B there are 45 students and $\frac{7}{9}$ of them like maths. Which class like maths the most?

5) In a shop there is a sale where everything is $\frac{2}{9}$ off. If the price for a top before the sale is £18 and a pair of shoes is £27 what is their price in the sale?

GRIDS FOR YELLOW SECTION

Q2a) $\frac{1}{4}$

2b) $\frac{1}{2}$

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

2d) $\frac{3}{4}$

Q3a) WHICH IS BIGGER?

$\frac{3}{8}$

OR

$\frac{1}{4}$

Q3b) WHICH IS BIGGER?

$\frac{3}{5}$

OR

$\frac{1}{2}$

3c) WHICH IS BIGGER?

$\frac{1}{3}$

OR

$\frac{3}{9}$
