

Fractions

Hi Yachts ☺

Mental Maths

Choose the best option for you then solve the problem in your head:

**Option 1:** Nina is thinking of a 2D shape that has four sides but not all of the sides are the same length. What is the shape?

**Option 2:** Nina is thinking of a 3D shape that has five faces, eight edges and five vertices. What is the shape?

Use the RUCSAC method to solve the problems:



**Read**

Read the question carefully.



**Underline**

Underline or write down the keywords and numbers.



**Choose**

Choose the correct operation (+ - x or ÷) and a mental or written method of calculation (you could use diagrams).



**Solve**

Solve it! Make sure you follow the steps carefully.



**Answer**

Check that you have answered the question properly. What did you need to find out in the first place?



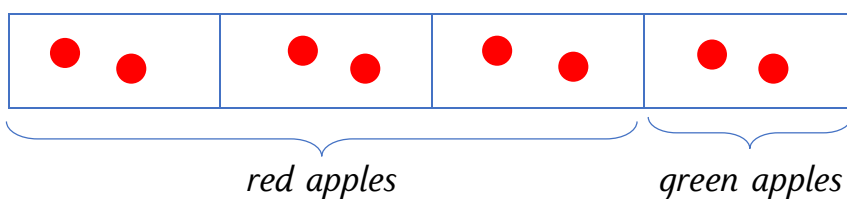
**Check**

Check your answer. Use the inverse calculation or another checking technique (was it close to your estimate?)

Use a fraction strip to help you with these questions. *Example: I have 8 apples. Three quarters of them are red and one quarter of them are green.*

a. How many apples are red?

b. How many apples are green?



1. I have 15p and I spend one third of it.

- How much money do I spend?
- How much money do I have left?



2. I spent 32 minutes completing my homework. For half of the time I was working on Maths and for the other half I was working on Literacy.

- How much time did I spend on my Maths homework?
- How much time did I spend on my Literacy homework?



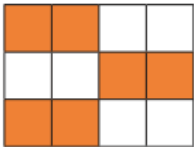


3. 24 people took part in a marathon but one quarter of them dropped out before the finish line.

- How many people completed the marathon?
- How many people dropped out of the marathon?

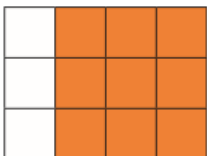


4. Is the fraction in the table equivalent to (worth the same as) two quarters? Complete the table.

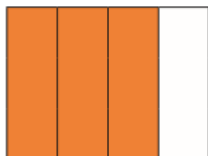
Fraction	Is it equivalent to $\frac{2}{4}$ ? ✓ or ✗
a) 	
b) 	
c) 	

5. Which one is the odd one out and why?

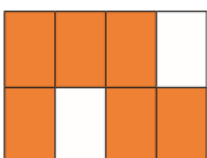
A



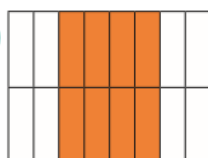
B



C



D



6. Hana, Isla and Fabien each had a bar of chocolate that was the same size. Hana ate two quarters of her bar of chocolate. Isla ate three sixths of her chocolate and Fabien ate five tenths of his chocolate. Who ate the most? You could draw diagrams to help you.
7. Nina says that equivalent fractions always have the same numerator (the number on the top of the fraction).
- Is this statement true or false?
  - Prove it (you could use question 4 to help you).

### Challenges

8. Write the value of the digit that has been shaded in for each number below. The first one has been done for you.

3. <b>6</b>	4 <b>5</b> .85	<b>1</b> 36.7	84. <b>3</b> 2
6 tenths			
<b>4</b> 6.48	284. <b>3</b> 9	6. <b>0</b> 8	1 <b>2</b> .98

9. Complete the following calculations – use the place value chart to help you.

a. $8 \div 10 = \underline{\quad}$	b. $5 \div 10 = \underline{\quad}$	c. $37 \div 10 = \underline{\quad}$	d. $62 \div 10 = \underline{\quad}$
e. $7 \div 100 = \underline{\quad}$	f. $3 \div 100 = \underline{\quad}$	g. $16 \div 100 = \underline{\quad}$	h. $49 \div 100 = \underline{\quad}$

Tens	Ones	Tenths	Hundredths