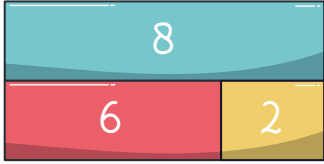


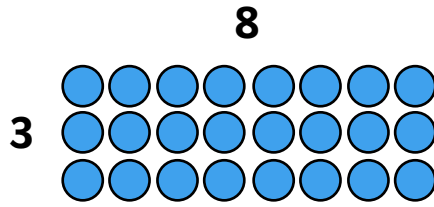
Factors



Pictorial



1) If you had 24 counters, what different ways could you arrange them in an array?
One has been done for you.



Factors

$$2+2=4$$

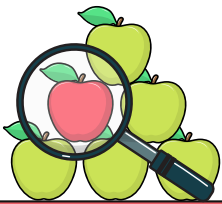
Fluency



2) Write down all the factors for each of these numbers.
How can you be sure you have found them all?

- a) 15
- b) 32
- c) 18

Factors



Odd one out



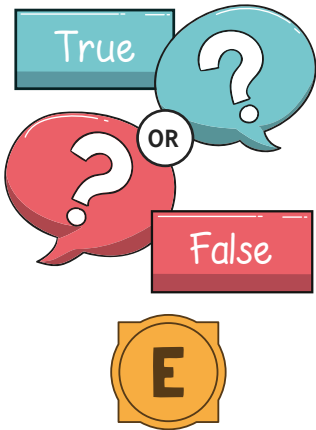
3) Circle the odd one out in each set of numbers. Explain why it is the odd one out.

1, 12, 2, 6, 8, 3, 4

1, 60, 2, 25, 30, 3, 20, 4, 15, 6, 5

1, 20, 10, 3, 2, 4, 5

Factors



4) Are each of these statements true or false? Prove it!

True

False

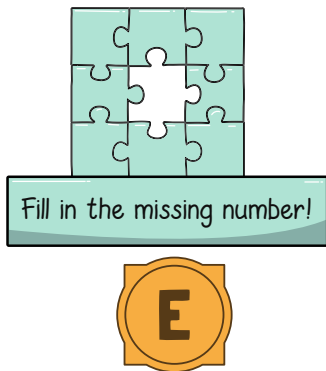
Odd numbers always have an odd number of factors.

True

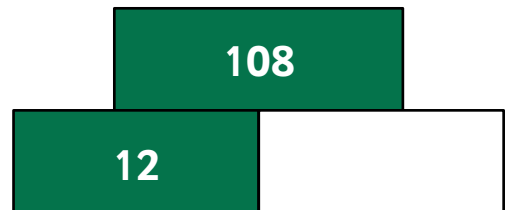
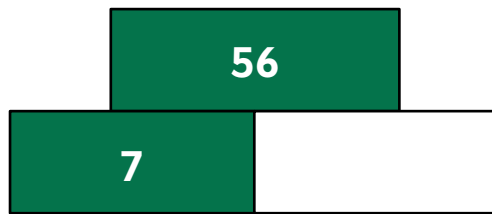
False

The larger the number, the more factors it will have.

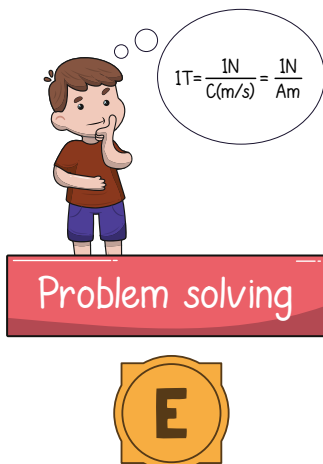
Factors



5) The number at the top of each pyramid is the product of the factor pair below. Complete the missing numbers in the pyramids.



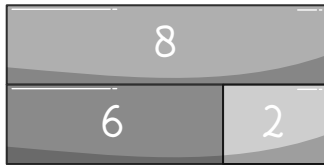
Factors



6) Find the missing factors in this multiplication grid.

	X	<input type="text"/>	<input type="text"/>	10
<input type="text"/>				60
7		14		
<input type="text"/>			40	80

Factors

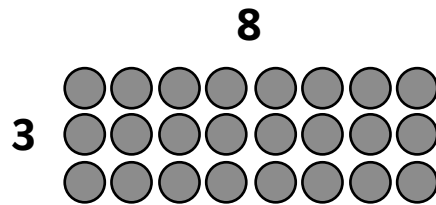


Pictorial



ANSWERS

- 1) If you had 24 counters, what different ways could you arrange them in an array?
One has been done for you.



Arrays should show:

1×24 / 2×12 / 4×6

Factors

$$2 + 2 = 4$$

Fluency

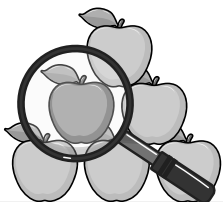


ANSWERS

- 2) Write down all the factors for each of these numbers.
How can you be sure you have found them all?

- a) 15 1×5 3×5
b) 32 1×32 2×16 4×8
c) 18 1×18 2×9 3×6

Factors



Odd one out



ANSWERS

- 3) Circle the odd one out in each set of numbers. Explain why it is the odd one out.

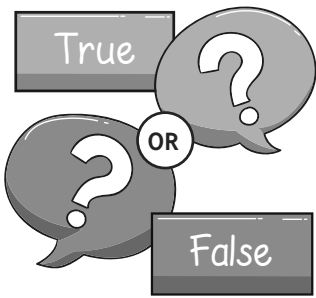
1, 12, 2, 6, 8, 3, 4

1, 60, 2, 25, 30, 3, 20, 4, 15, 6, 5

1, 20, 10, 3, 2, 4, 5

8 is not a factor of 12 all the others are, 25 is not a factor of 60 and all the others are,
3 is not a factor of 20 and all the others are

Factors



ANSWERS

4) Are each of these statements true or false? Prove it!

True False

Odd numbers always have an odd number of

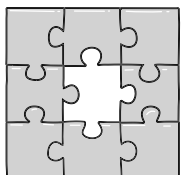
False E.g. 15 is odd but the factors are 1, 15, 3 and 5 so there are 4 factors and 4 is an even number. Various other answers.

True False

The larger the number, the more factors it will have.

False. E.g. factors of 8 are 1, 8, 2, 4 and the factors of 11 (which is a larger number) are just 1 and 11. Various other answers.

Factors

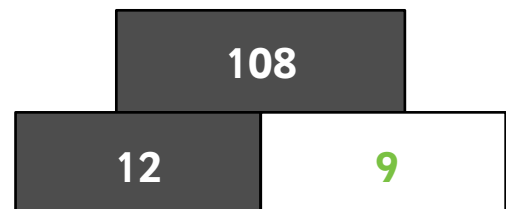
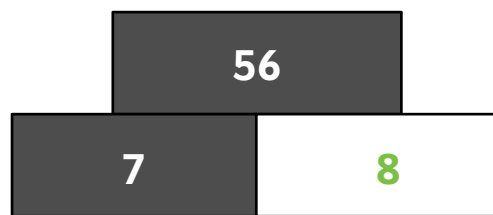


Fill in the missing number!

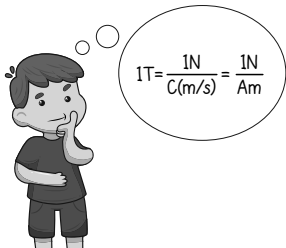


ANSWERS

5) The number at the top of each pyramid is the product of the factor pair below. Complete the missing numbers in the pyramids.



Factors



Problem solving



ANSWERS

6) Find the missing factors in this multiplication grid.

	X	2	5	10
6		12	30	60
7		14	35	70
8		16	40	80