Level 2 Maths
Problem Solving Cards

twinkl

Problem 1:

Move only 3 counters to turn this triangle upside down.

Problem 2:

Mack needs to cross a bridge that is being guarded by a troll. This troll won't allow anyone to cross and tells them to go back in the direction they came from. It will take Mack at least 4 minutes to cross the bridge BUT the troll comes out every 3 minutes to check that no little children are crossing his bridge!

Mack thinks that he is very clever and that he has solved how to get to the other side of the bridge without being caught by the troll. How?

Problem 3:

Mrs Simms has bought 10 pear trees for Central South School. She wants to plant them in 5 lines, with four trees in each line.

How will Mrs Simms plant the trees so that she can get this look?

Problem 4:

I have a number in my head. Use my clues to work out the number.

- It is an odd number.
- It is between 40 and 60.
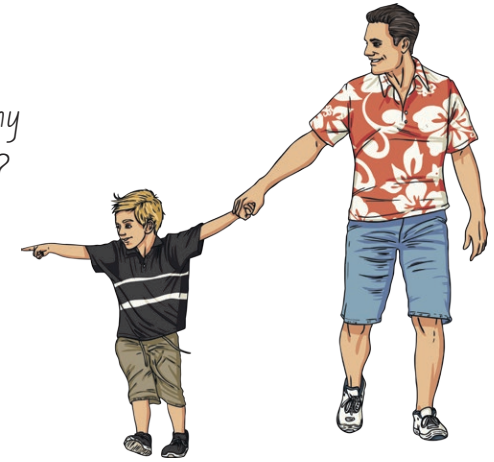- The sum of the digits equal 11.

What is my number?

Problem 5:

I am 8 years old.

My father is 41 years old.

In how many years will my father's age be twice my age?

Problem 6:

My grandma is 60 years old today.

She has only had 15 birthdays in her whole life.
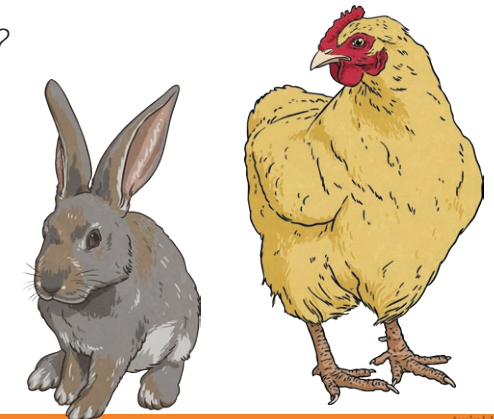
How is this possible?

Problem 7:

Mr Jones puts some chickens and some rabbits in a cage.

There are 20 heads and 64 legs in the cage.

How many chickens are there?
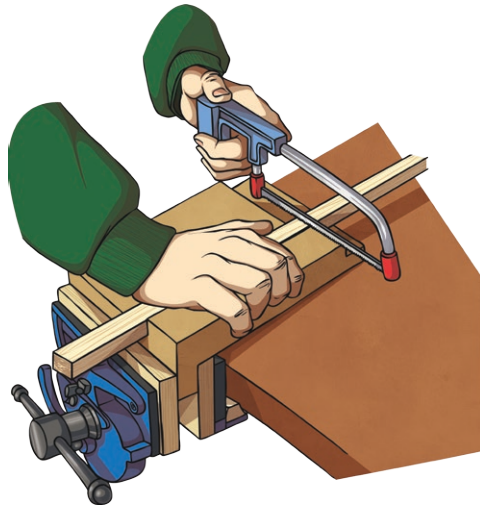
How many rabbits are there?

Problem 8:

Ollie has a piece of wood that is 32cm long.

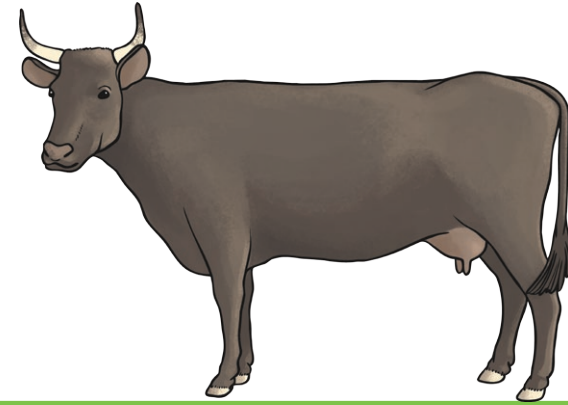He wants to cut it into 8 evenly sized pieces.

It takes him 1 minute to cut one piece.

How long does it take him to finish cutting all 8 pieces?

Problem 9:

A cow is facing south. If the cow turns 360 degrees, what direction will her tail be pointing?

Problem 10:

Fill in the boxes using the digits 0 – 9 so that you make 3 correct equations. You can only use each digit once, but you must use all the digits.
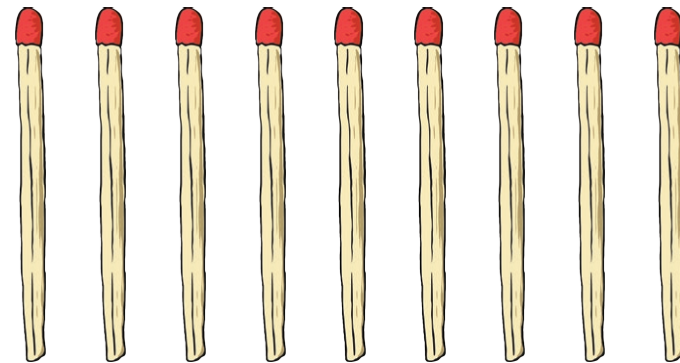
$$\square + \square = \square$$

$$\square - \square = \square$$

$$\square \times \square = \square$$

Problem 11:

Can you make 6 squares using only these 9 matchsticks?
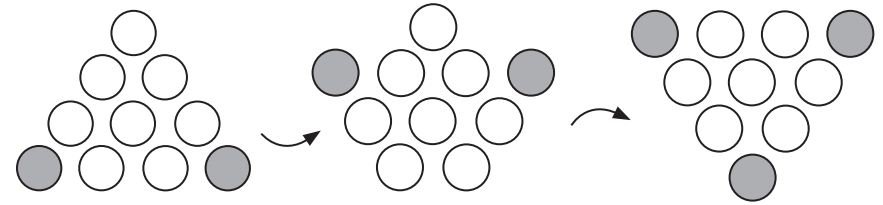
Level 2 Maths
Problem Solving Cards
Answers

Problem 1:

Move only 3 counters to turn this triangle upside down.

Move the 1st and the 4th counters of the bottom row to the row second from the top. Move the counter from the top to the bottom.

Problem 2:

Mack needs to cross a bridge that is being guarded by a troll. This troll won't allow anyone to cross and tells them to go back in the direction they came from. It will take Mack at least 4 minutes to cross the bridge BUT the troll comes out every 3 minutes to check that no little children are crossing his bridge!

Mack thinks that he is very clever and that he has solved how to get to the other side of the bridge without being caught by the troll. How?

Mack starts to cross the bridge just after the troll has checked the bridge. After 2 minutes, Mack turns around and goes back in the direction that he came from. When the troll comes out for the next check he sees Mack and tells him to turn around and go back. So that means that Mack can finish crossing the bridge in the direction that he needs to go.

Problem 3:

Mrs Simms has bought 10 pear trees for Central South School. She wants to plant them in 5 lines, with four trees in each line.

How will Mrs Simms plant the trees so that she can get this look?
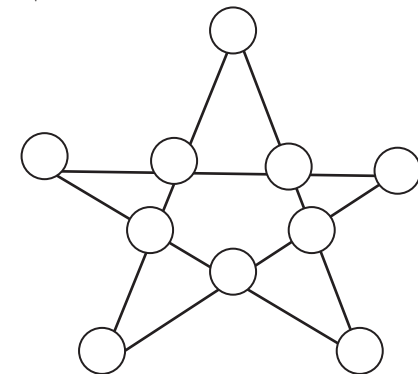
Problem 4:

I have a number in my head. Use my clues to work out the number.

- It is an odd number.
- It is between 40 and 60.
- The sum of the digits equal 11.

What is my number?

47

Problem 5:

I am 8 years old.

My father is 41 years old.

In how many years will my father's age be twice my age?

In 25 years I will be 33 and my father will be 66 which is twice my age.

Problem 6:

My grandma is 60 years old today.

She has only had 15 birthdays in her whole life.

How is this possible?

Grandma was born on Leap Day, the 29th of February. This only happens every 4 years.

Problem 7:

Mr Jones puts some chickens and some rabbits in a cage.

There are 20 heads and 64 legs in the cage.

How many chickens are there?

How many rabbits are there?

12 rabbits and 8 chickens.

Problem 8:

Ollie has a piece of wood that is 32cm long.

He wants to cut it into 8 evenly sized pieces.

It takes him 1 minute to cut one piece.

How long does it take him to finish cutting all 8 pieces?

7 minutes

Problem 9:

A cow is facing south. If the cow turns 360 degrees, what direction will her tail be pointing?

Downwards, because a cow's tail always points downwards.

Problem 10:

Fill in the boxes using the digits 0 – 9 so that you make 3 correct equations. You can only use each digit once, but you must use all the digits.

$$3 + 6 = 9$$
$$8 - 7 = 1$$
$$4 \times 5 = 20$$

Problem 11:

Can you make 6 squares using only these 9 matchsticks?