

To be able to form equations



Starter:

Referring to the algebraic equations shown...
What's the same? What's different?

$$x + 3 = 7$$

$$x - 3 = 7$$

Explain your answer.

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Activity 1:

Use cubes and counters to represent the worded problem algebraically.

Create your own question and set it for your table partner.

worded problem	equipment	algebra
I think of a number		
I add 4		
The answer is 6		

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Activity 2:

In total, a barrel of peanut butter holds 50 litres.

There are 39 litres of peanut paste. The amount of vegetable oil is v litres.

Express the information given as a bar model and then as an algebraic equation.

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Activity 3:

Write algebraic equations to match each of the statements below.

- a) I am thinking of a number, when I subtract 5, the answer is 11.

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- b) I am thinking of a number, when I add 17, then answer is 59.

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- c) I am thinking of a number, when I multiply it by 8, the answer is 56.

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Activity 4:

Jamal thinks of a number, he adds 9 to the number and divides the result by 2.

Ruth thinks of a number, she multiplies it by 2 and subtracts 3.

Ruth and Jamal are thinking of the same number.

Jamal's answer is 10.

What number are they both thinking of?

What is Ruth's answer?

Explain your response.

They both think of another number.
They have the same number and result.
What number are they thinking of?

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Activity 5:

Ahmed spends £96 on candles and flowers.

He buys c candles costing £9 and f flowers costing £3.

- a) Write an equation to represent what Ahmed has bought?

- b) How many candles and flowers might Ahmed have bought?
Explain your answer.

Write a word problem to match:
 $78 = 16d + 5r$

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Evaluation:



You must use
addition to form
an algebraic
equation.

Is Astrobee's statement true or false?
Explain your answer.