

Workout

Question 1: I think of a number.
I multiply the number by 3 and then add 5.
The answer is 29.

- (a) Form an equation in terms of x .
- (b) Solve the equation to find the original number.

Question 2: I think of a number.
I multiply the number by 5 and then subtract 2.
The answer is 58.

- (a) Form an equation in terms of x .
- (b) Solve the equation to find the original number.

Question 3: I think of a number.
I divide the number by 2 and then add 1.
The answer is 7.

- (a) Form an equation in terms of x .
- (b) Solve the equation to find the original number.

Question 4: Gregory is x years old.
Daisy is 2 years older than Gregory
The sum of their ages is 40.



- (a) Form an equation in terms of x
- (b) Solve the equation and work out Gregory's and Daisy's ages.

Question 5: Robert is x years old.
Hannah is 7 years younger than Robert
The sum of their ages is 61.

- (a) Form an equation in terms of x
- (b) Solve the equation and work out Robert's and Hannah's ages.

Equations: Forming and Solving

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Question 6: Michael is x years old.
Jenny is twice as old as Michael
The sum of their ages is 57.

- (a) Form an equation in terms of x
- (b) Solve the equation and work out Michael's and Jenny's ages.

Question 7: Fiona is x years old.
Thomas is 3 years older than Fiona.
Cara is twice as old as Fiona.
The sum of their ages is 51.

- (a) Form an equation in terms of x
- (b) Solve the equation and work out Fiona's, Thomas's and Cara's ages.

Question 8: Alan is x years old.
Barry is ten years younger than Alan.
Kevin is double Alan's age.
The sum of their ages is 54.

- (a) Form an equation in terms of x
- (b) Solve the equation and work out Alan's, Barry's and Kevin's ages.

Question 9: Rebecca is x years old.
Mary is 8 years older than Rebecca.
Jill is three times older than Mary.
The sum of their ages is 67.

- (a) Form an equation in terms of x
- (b) Solve the equation and work out Rebecca's, Mary's and Jill's ages.

Question 10: Andy has x pence.
Kelly has 7 pence more than Andy.
Georgia has 9 pence less than Andy.
The total amount of money they have is £1.48



- (a) Form an equation in terms of x
- (b) Solve the equation and work out how much money each has.

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Question 11: Billy has x pounds.

Liam has twice as much money as Billy.

Nicola has three times as much money as Liam.

The total amount of money they have is £180

- (a) Form an equation in terms of x
- (b) Solve the equation and work out how much money each has.

Question 12: Farmer Jones has x sheep

Farmer Smith has 100 more sheep than Farmer Jones.

Farmer White has twice as many sheep as Farmer Jones.

In total there are 2500 sheep.



- (a) Form an equation in terms of x
- (b) Solve the equation and work out how many sheep each farmer has.

Question 13: The cost of a TV is £ x

The cost of a DVD player is £45 less than a TV.

The total cost of the TV and DVD player is £235

- (a) Form an equation in terms of x
- (b) Find the cost of a TV

Question 14: The sum of three consecutive numbers is 51.

- (a) Form an equation in terms of x
- (b) Solve the equation and work out each number.

Question 15: The sum of five consecutive numbers is 110.

- (a) Form an equation in terms of x
- (b) Solve the equation and work out each number.

Question 16: A rectangular field is 7 metres longer than wide.

The perimeter of the field is 106m.

- (a) Find the dimensions of the field.
- (b) Find the area of the field.

Question 17: A rectangular field is 20 metres longer than wide.

The perimeter of the field is 280m.

- (a) Find the dimensions of the field.
- (b) Find the area of the field.