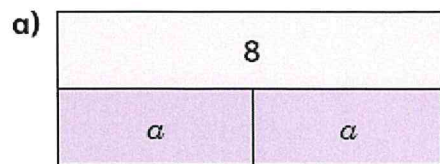
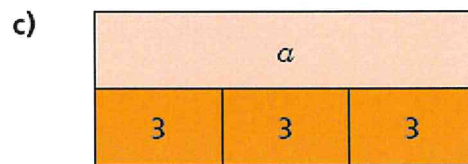


Write algebraic equations to represent the bar models.

Find the value of α in each one.



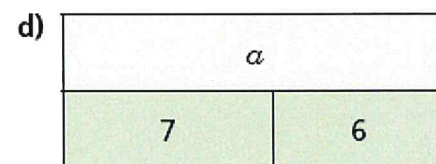
$$\alpha = 4$$



$$\alpha = 9$$



$$\alpha = 5$$



$$\alpha = 13$$

Find the value of y .

$$y + 8 = 14$$

6

$$3y = 24$$

8

$$50 - y = 23$$

27

$$\frac{y}{4} = 28$$

112

4

because inverse

$$28 \times 4 = 112$$

Nijah is solving the equation $x - 8 = 20$

$$x - 8 = 20$$

$$x = 20 - 8$$

$$x = 12$$

What mistake has Nijah made? *She should've + 8 so $x = 28$*

Filip thinks of a number.

He subtracts 5 from his number.

He ends up with 10

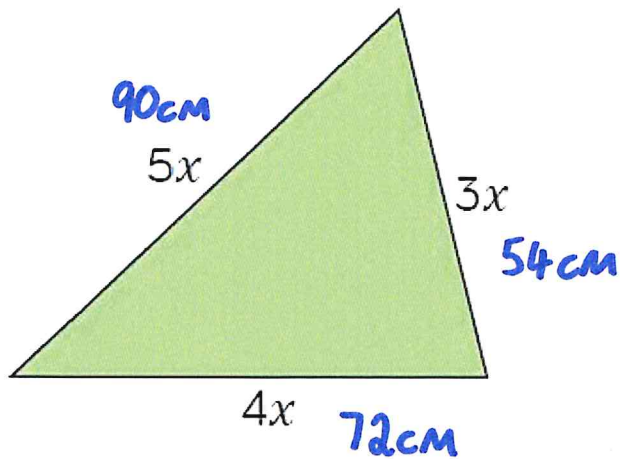
Write an algebraic equation to represent Filip's problem.

$$x - 5 = 10$$

Solve the equation to work out his number. $x = 15$

$$10 + 5$$

The perimeter of the triangle is 216 cm.



Form an equation to show this information.

$$5x + 3x + 4x = 216$$

Solve the equation to find the value of x .

Work out the lengths of the sides of the triangle.

$$5 + 3 + 4 = 12$$

$$12x$$

$$216 \div 12 = 18$$

$$x = 18$$

$$5x = 5 \times 18 = 90$$

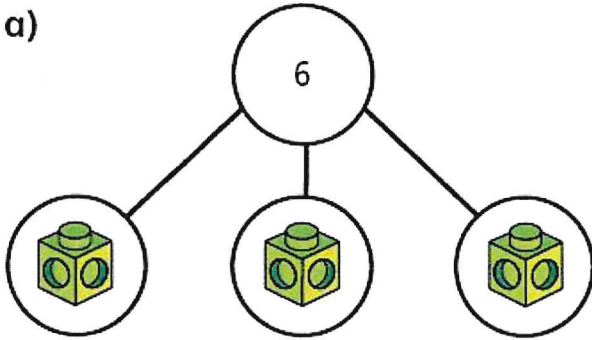
$$4x = 4 \times 18 = 72$$

$$3x = 3 \times 18 = 54$$

Write an equation for each part-whole model.

Work out the value of the multilink cube in each equation.

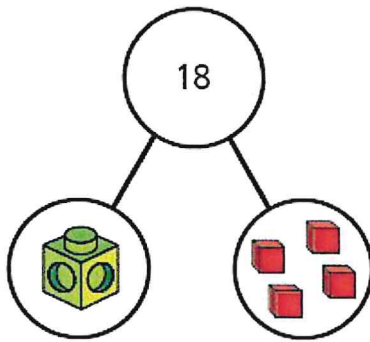
a)



$$3x = 6$$

= 2

b)



$$x + 4 = 18$$

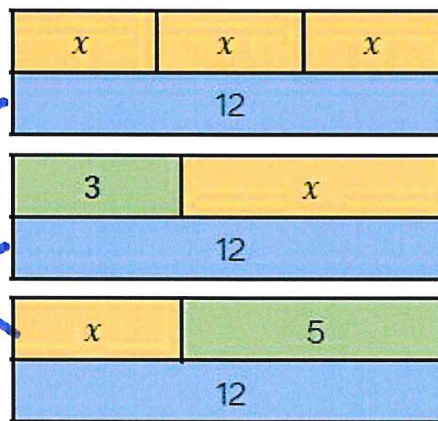
= 14

Match each equation to the correct bar model and then solve to find the value of x .

$x + 5 = 12$

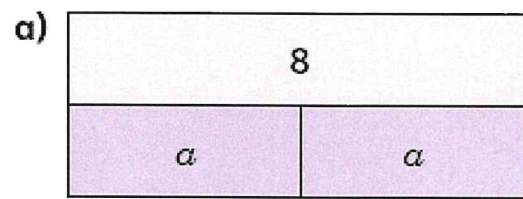
$3x = 12$

$12 = 3 + x$

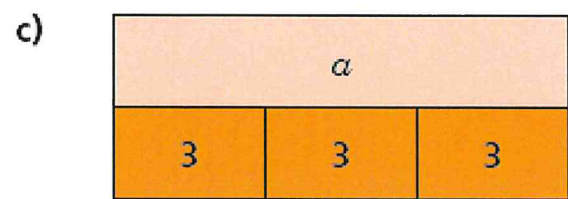


Write algebraic equations to represent the bar models.

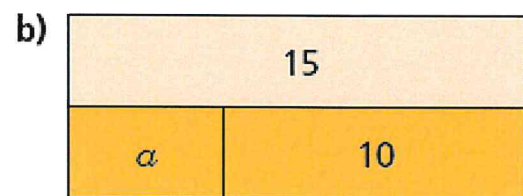
Find the value of a in each one.



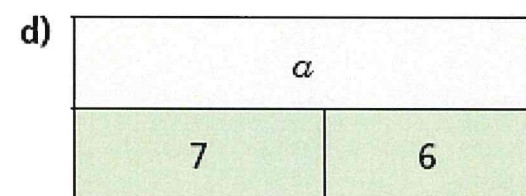
$$a = 4$$



$$a = 9$$



$$a = 5$$



$$a = 13$$