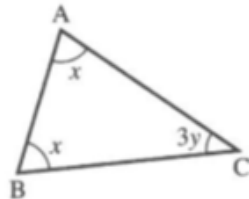
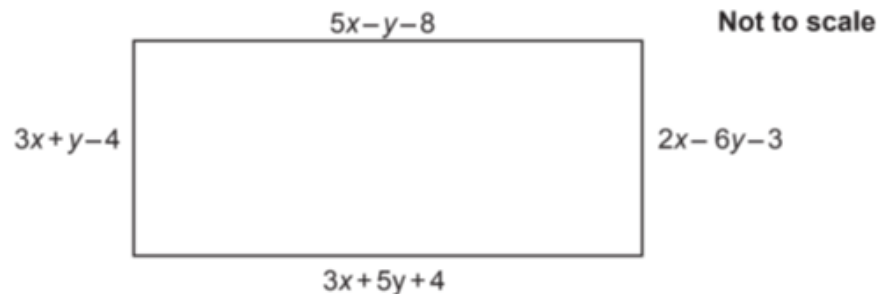


Solve the problems by forming a pair of simultaneous equations.

1. Find two numbers whose sum is 9 and which have a difference of 6. [Let the numbers be  $x$  and  $y$ .]
2. Twice one number plus the other number adds up to 13. The sum of the numbers is 10.
3. Double the larger number plus three times the smaller number makes 19. The difference between the numbers is 2.
4. The mean of the two numbers is 11. The larger number is one more than twice the smaller number.
5. Angle A is  $12^\circ$  greater than angle C. Find the angles of the triangle.



6. The dimensions of this rectangle are shown as algebraic expressions. Work out the length and width of the rectangle.



7. It takes 3 hours for a boat to travel 27 miles upstream. The same boat can travel 30 miles downstream in 2 hours. Find the speeds of the boat and the current.

Solve the problems by forming a pair of simultaneous equations.

1. Find two numbers whose sum is 9 and which have a difference of 6. [Let the numbers be  $x$  and  $y$ .]

7.5, 1.5

2. Twice one number plus the other number adds up to 13. The sum of the numbers is 10.

3, 7

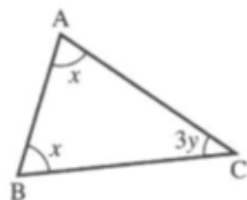
3. Double the larger number plus three times the smaller number makes 19. The difference between the numbers is 2.

5, 3

4. The mean of the two numbers is 11. The larger number is one more than twice the smaller number.

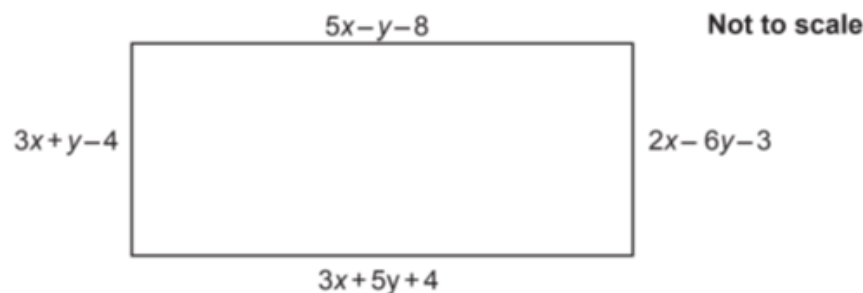
7, 15

5. Angle A is  $12^\circ$  greater than angle C. Find the angles of the triangle.



64, 64, 52

6. The dimensions of this rectangle are shown as algebraic expressions. Work out the length and width of the rectangle.



15 and 9

$$x = 4.5$$

$$y = -0.5$$

$$\text{length} = 15$$

$$\text{width} = 9$$

7. It takes 3 hours for a boat to travel 27 miles upstream. The same boat can travel 30 miles downstream in 2 hours. Find the speeds of the boat and the current.

12 and 3