POLYNOMIAL EQUATIONS

NAME: _____

Answer the all questions.

01. $x^2 + 2x = 0$, Solve the equation.

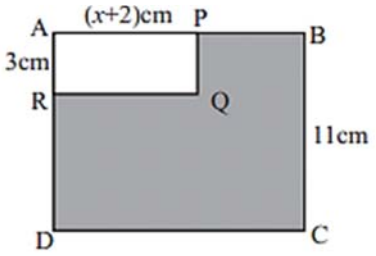
02. Find the value of x, $4 - 5(3 - x) = 2(x - 1)$

03. The perimeter of a triangle with sides of length x, $(x + 3)$, and $(2x - 5)$ units is 38 units. Construct a simple equation based on this information and solve the equation to find x.

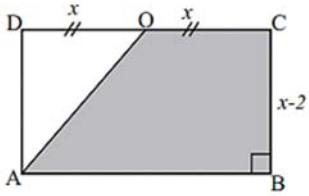
04. If the area of the rectangle $ABCD$ where $AB = (2x + 1)cm$ and $BC = (x + 2)cm$ is $77cm^2$, build up a quadratic equation including x and find the length of AB.

05. The length of a rectangle is 4 cm greater than its breadth. The area of the rectangle is 96 cm^2. Construct a quadratic equation taking the breadth of the rectangle as x. Solve the quadratic equation and find the length and the breadth of the rectangle

06. $ABCD$ is a square. It's length of a side is $11cm$. In the rectangle $APQR$, $AP = (x + 2)cm$ and $AR = 3cm$. The area of the shaded part is $97cm^2$. equation and find the length of AP.



07. In the rectangle $ABCD$, the mid point of DC is O, $DO = x$ and $BC = x - 2$. If the area of the trapezium $ABCO$ is $180cm^2$, build up a quadratic equation for the area of the trapezium and by solving it find the area of the triangle AOD.



08. Solve the following quadratic equation. $2x^2 + 5x - 3 = 0$

09. Solve

$$\frac{100}{x} - \frac{100}{x+5} = 1$$

10. If the perimeter of the following triangle is 21 cm, find the length of the side BC