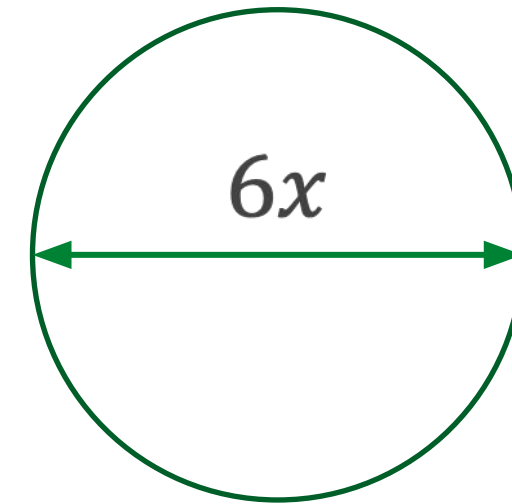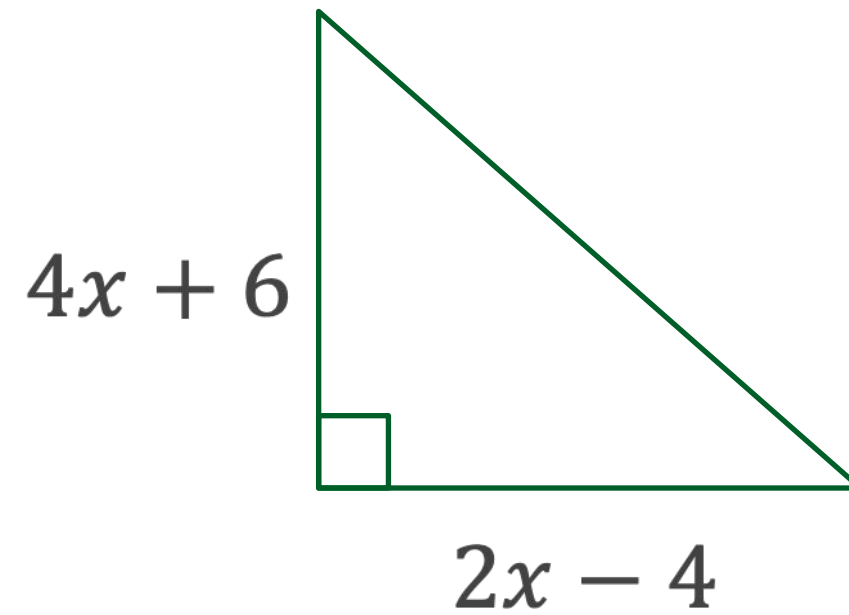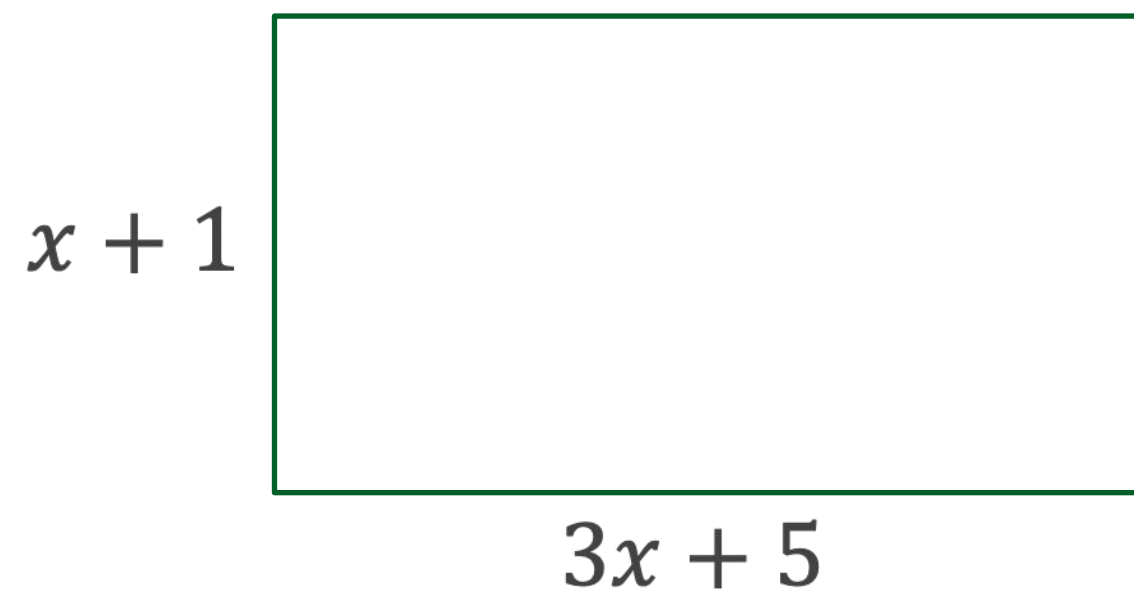Mathematics

Forming quadratic equations II

Mr Coward

Try this

Find the area of these shapes in terms of x.

The rectangle is labelled $x + 1$ on the left side and $3x + 5$ on the bottom.

The right triangle is labelled $4x + 6$ on the left side and $2x - 4$ on the bottom.

The circle has a diameter labelled $6x$.

Independent task

1) Form a quadratic equations for the area of these shapes.

$x - 1$ | Area = 42 cm^2

$x + 11$

Area = 6.8 cm^2

$3x - 5$

$4x + 6$ | Area = 311 cm^2

$10x$

$10x$ | Area = 37 cm^2
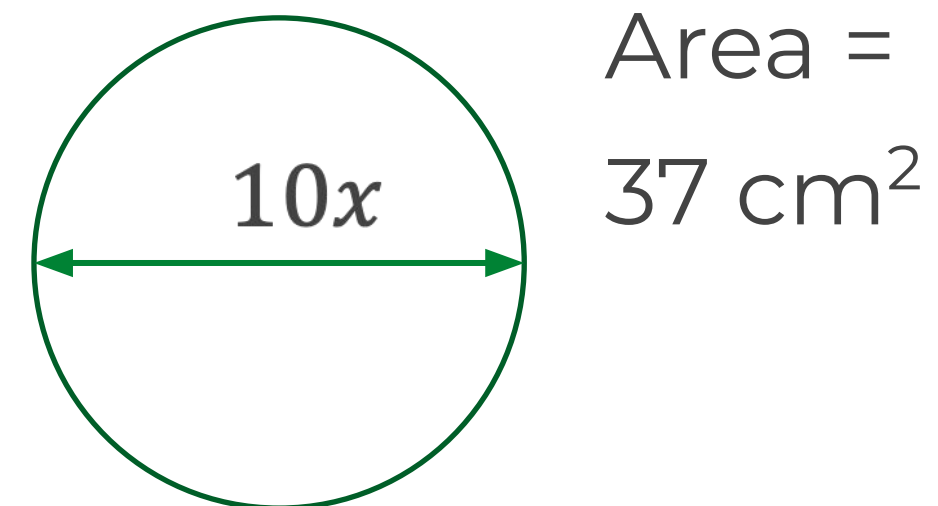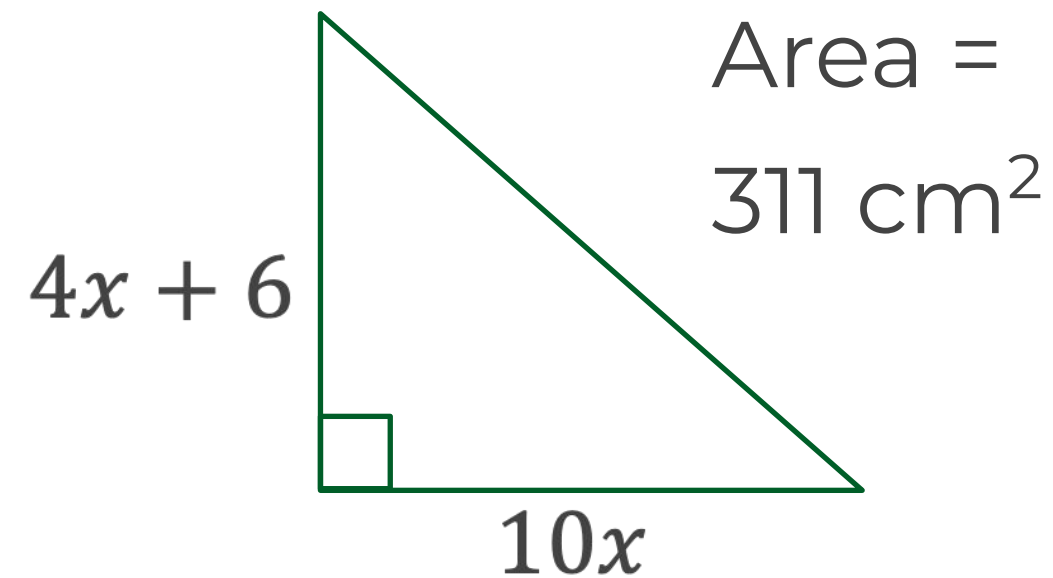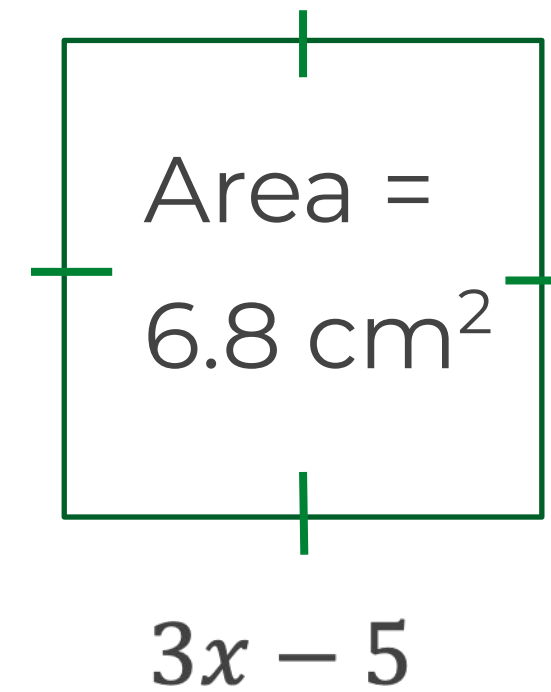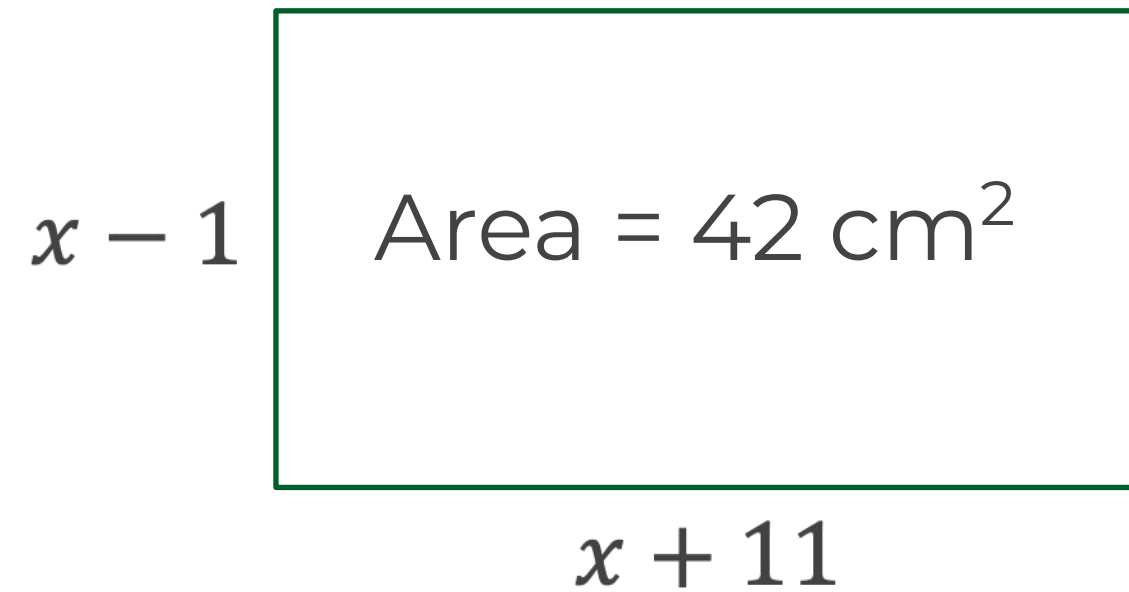
Independent task

2) Form a quadratic equations for the length of the hypotenuse squared.

$x + 5$

11

$x + 4$
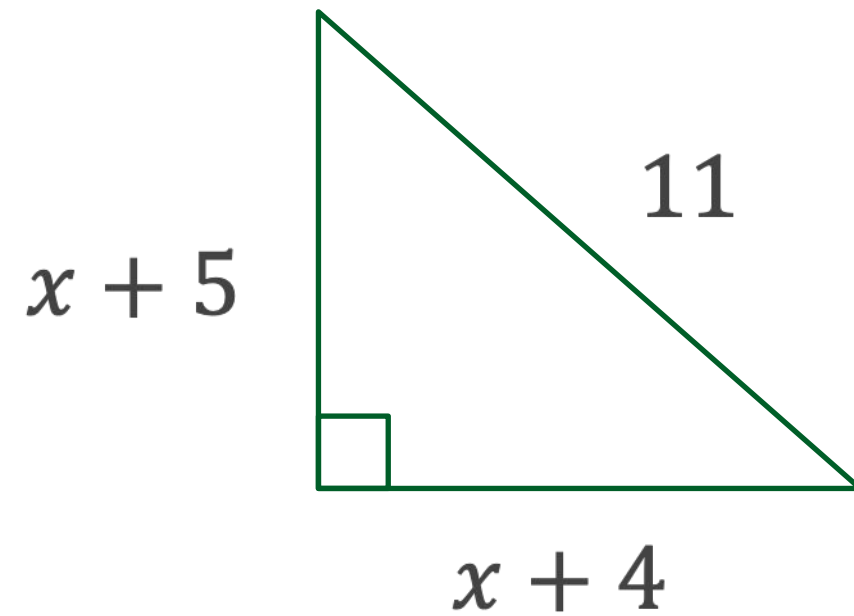
Explore

The surface area equals 200cm^2.

The volume equals 420cm^2.

Form two equations. What do you notice about your equations?

$x + 11$