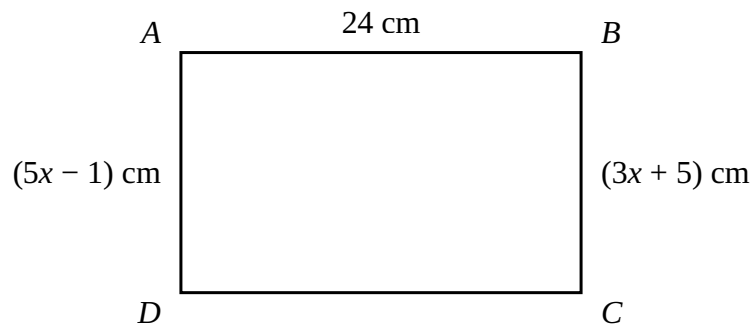


ALGEBRA & GEOMETRY: SETTING UP EQUATIONS**Best Guess Mastery Worksheet (Target Grade 4/5)****I Do**

The diagram shows rectangle $ABCD$.



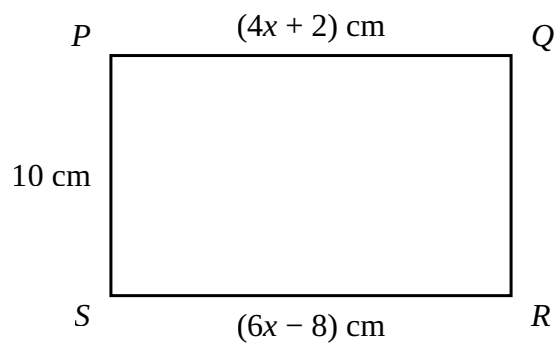
Work out the **Area** of the rectangle.

Show your working clearly.

Answer = cm^2

ALGEBRA & GEOMETRY: SETTING UP EQUATIONS**Best Guess Mastery Worksheet (Target Grade 4/5)****We Do**

The diagram shows rectangle $PQRS$.



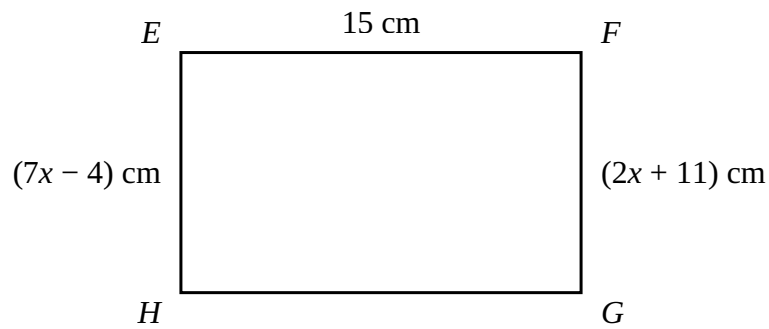
Work out the **Perimeter** of the rectangle.

Show your working clearly.

Answer = cm

ALGEBRA & GEOMETRY: SETTING UP EQUATIONS**Best Guess Mastery Worksheet (Target Grade 4/5)****You Do 1**

The diagram shows rectangle $EFGH$.



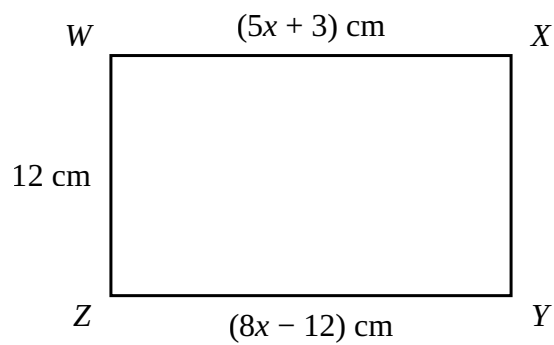
Work out the **Area** of the rectangle.

Show your working clearly.

Answer = cm^2

ALGEBRA & GEOMETRY: SETTING UP EQUATIONS**Best Guess Mastery Worksheet (Target Grade 4/5)****You Do 2**

The diagram shows rectangle $WXYZ$.



Work out the **Perimeter** of the rectangle.

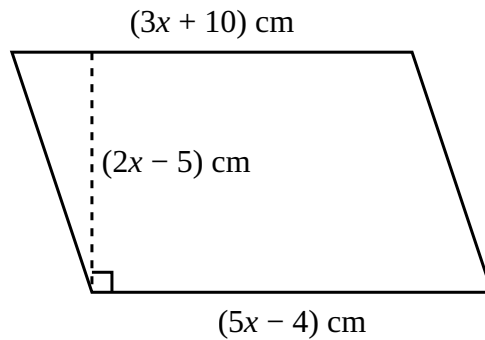
Show your working clearly.

Answer = cm

ALGEBRA & GEOMETRY: SETTING UP EQUATIONS**Best Guess Mastery Worksheet (Target Grade 4/5)****Challenge 1**

The diagram shows a parallelogram.

The lengths of its parallel top and bottom edges are given as expressions in terms of x .



Work out the **Area** of the parallelogram.

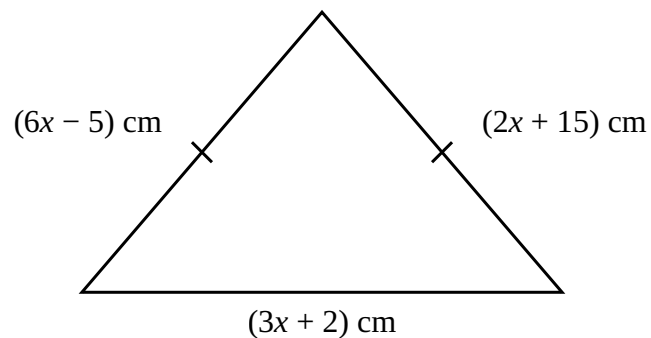
Show your working clearly.

Answer = cm^2

ALGEBRA & GEOMETRY: SETTING UP EQUATIONS**Best Guess Mastery Worksheet (Target Grade 4/5)****Challenge 2**

The diagram shows an isosceles triangle.

The lengths of the two equal sides and the base are given as expressions in terms of x .



Work out the **Perimeter** of the isosceles triangle.

Show your working clearly.

Answer = cm

Answers & Worked Solutions

I Do:

Opposite sides of a rectangle are equal in length.

$$5x - 1 = 3x + 5$$

$$2x = 6 \rightarrow x = 3$$

Substitute $x = 3$ into the length: Left side = $5(3) - 1 = 14$ cm.

$$\text{Area} = \text{width} \times \text{height} = 24 \times 14 = \mathbf{336 \text{ cm}^2}$$

We Do:

Opposite sides are equal.

$$6x - 8 = 4x + 2$$

$$2x = 10 \rightarrow x = 5$$

Substitute $x = 5$ into the length: Top side = $4(5) + 2 = 22$ cm.

$$\text{Perimeter} = 2 \times (22 + 10) = 2 \times 32 = \mathbf{64 \text{ cm}}$$

You Do 1:

Opposite sides are equal.

$$7x - 4 = 2x + 11$$

$$5x = 15 \rightarrow x = 3$$

Substitute $x = 3$ into the height: Left side = $7(3) - 4 = 17$ cm.

$$\text{Area} = \text{width} \times \text{height} = 15 \times 17 = \mathbf{255 \text{ cm}^2}$$

You Do 2:

Opposite sides are equal.

$$8x - 12 = 5x + 3$$

$$3x = 15 \rightarrow x = 5$$

Substitute $x = 5$ into the length: Top side = $5(5) + 3 = 28$ cm.

$$\text{Perimeter} = 2 \times (28 + 12) = 2 \times 40 = \mathbf{80 \text{ cm}}$$

Challenge 1:

Opposite sides of a parallelogram are equal.

$$5x - 4 = 3x + 10$$

$$2x = 14 \rightarrow x = 7$$

$$\text{Base} = 5(7) - 4 = 31 \text{ cm.}$$

$$\text{Perpendicular height} = 2(7) - 5 = 9 \text{ cm.}$$

$$\text{Area} = \text{base} \times \text{height} = 31 \times 9 = \mathbf{279 \text{ cm}^2}$$

Challenge 2:

An isosceles triangle has two equal sides.

$$6x - 5 = 2x + 15$$

$$4x = 20 \rightarrow x = 5$$

$$\text{Equal sides} = 6(5) - 5 = 25 \text{ cm (each).}$$

$$\text{Base} = 3(5) + 2 = 17 \text{ cm.}$$

$$\text{Perimeter} = 25 + 25 + 17 = \mathbf{67 \text{ cm}}$$