

The Weekly Quiz | Proposed Question

Name: ?

Term: ? Week: ?

Question

Type your question here. You may include a diagram if appropriate. The question should be difficult enough to be awarded 2–4 marks.

(Remember – it needs to fit on a quarter-A4 sheet!)

Worked Solution (including marking scheme)

Type your answer here, and indicate where you would allocate marks. Try to anticipate different ways to solve the question – you may need to include multiple possible solutions.

Use the format below to present equations with correct formatting.

$$\frac{x-1}{3} = \frac{2x+1}{x-3}$$

$$(x - 1)(x - 3) = 3(2x + 1)$$

1 mark: cross-multiply

$$x^2 - 3x - x + 3 = 6x + 3$$

$$x^2 - 4x + 3 = 6x + 3$$

$$x^2 - 10x = 0$$

1 mark: simplify algebra

$$x(x - 10) = 0$$

$$x = 0 \text{ or } 10.$$

1 mark: final answer ($\frac{1}{2}$ each)

Total: **3 marks**