

1 (a) Simplify fully $\frac{x^2 + 9x + 14}{x^2 - 4}$

[3 marks]

Answer _____

2 Circle the correct statement.

[1 mark]

$$3x \equiv x + 2x$$

$$3x \equiv 2$$

$$3x + x \equiv 2 - x$$

$$3x + x - 2 \equiv 0$$

[4 marks]

[illegible]

4 (a) Show that $4x(3x + 2) - 2x^2\left(6 - \frac{5}{x}\right) - 6x\left(3 + \frac{7}{x}\right)$ simplifies to an integer.

[3 marks]
