Practice worksheet | Quadratics and polynomial graphs

Cubic factors and roots

Name: _____ Date: _____

6 questions | 16 marks

1. Show x-2 divides $x^3 - 4x^2 + x + 6$. [2 marks]

2. Divide $x^3 - 4x^2 + x + 6$ by x-2. [3 marks]

3. Solve $x^3 - 4x^2 + x + 6 = 0$. [3 marks]

4. Find k when x+2 divides $x^3 + kx + 6$. [2 marks]

5. Factorise $x^3 + 2x^2 - 9x - 18$. [3 marks]

6. Solve $x^3 - 3x + 2 = 0$, stating repeated roots. [3 marks]