

WJEC June 2018 Q5

- (a) Find the remainder when $2x^3 - x^2 + 2x + 1$ is divided by $x + 3$. [2]
- (b) (i) Show that $x + 2$ is a factor of $x^3 - 6x^2 - 49x - 66$. [2]
- (ii) Hence factorise $x^3 - 6x^2 - 49x - 66$. [4]

WJEC June 2017 Q4

- (a) Find the remainder when $2x^3 - 5x^2 + 8x - 6$ is divided by $x + 4$. [2]
- (b) (i) Show that $x - 2$ is a factor of $x^3 + 9x^2 + 8x - 60$. [2]
- (ii) Hence factorise $x^3 + 9x^2 + 8x - 60$. [4]

WJEC June 2016 Q10

- (a) Find the remainder when $x^3 + 6x^2 - x - 30$ is divided by $x - 4$. [2]
- (b) (i) Show that $x - 2$ is a factor of $x^3 + 6x^2 - x - 30$. [2]
- (ii) Hence factorise $x^3 + 6x^2 - x - 30$. [4]

WJEC June 2015 Q7

- (a) Find the remainder when $3x^3 - 2x^2 + 5x - 1$ is divided by $x + 2$. [2]
- (b) (i) Show that $x - 2$ is a factor of $x^3 + 8x^2 + x - 42$. [2]
- (ii) Hence factorise $x^3 + 8x^2 + x - 42$. [4]

WJEC June 2014 Q10

- (a) Find the remainder when $x^3 + 5x^2 + 2x - 8$ is divided by $x - 3$. [2]
- (b) (i) Show that $x - 1$ is a factor of $x^3 + 5x^2 + 2x - 8$. [2]
- (ii) Hence factorise $x^3 + 5x^2 + 2x - 8$. [4]
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WJEC June 2013 Q8

- (a) Find the remainder when $7x^3 - 4x^2 + x - 2$ is divided by $x - 2$. [2]
- (b) (i) Show that $x + 3$ is a factor of $x^3 + 4x^2 - 17x - 60$. [2]
- (ii) Hence, factorise $x^3 + 4x^2 - 17x - 60$. [4]
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WJEC June 2012 Q4

- (a) Given that $f(x) = x^3 - 2x^2 - 9x + 18$, evaluate $f(-3)$.
- Write down what this tells you about $f(x)$. [3]
- (b) Factorise $x^3 - 2x^2 - 9x + 18$. [4]
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WJEC June 2011 Q5

- (a) Find the remainder when $6x^3 - 13x^2 + x + 2$ is divided by $x + 3$.
- (b) (i) Show that $x - 2$ is a factor of $6x^3 - 13x^2 + x + 2$. [2]
- (ii) Hence factorise $6x^3 - 13x^2 + x + 2$. [4]
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