

2	(a)	<b>DR</b> $5 \times 2^3 - 4 \times 2^2 + 2a - 2 = 0$ oe or $40 - 16 + 2a - 2 = 0$ oe $a = -11$	<b>M1</b>  <b>A1</b> [2]	<b>1.1</b>  <b>1.1</b>	Substitute $x = 2$ and equate to 0. May be implied or $\div$ by $(x - 2)$ & obtain $5x^2 + 6x + 1$ $a = -11$ , with no working SC: B1
2	(b)	<b>DR</b> $5x^3 - 4x^2 - 11x - 2 = (x - 2)(px^2 + qx + r)$ oe  $= (x - 2)(5x^2 + 6x + 1)$ $= (x - 2)(5x + 1)(x + 1)$ ISW	<b>M1</b>  <b>A1</b> <b>A1</b> [3]	<b>1.1</b>  <b>1.1</b> <b>1.1</b>	attempted, or attempt $(5x^3 - 4x^2 - 11x - 2) \div (x - 2)$ ft (a) May be implied by next line  Above method must be seen. Use of solutions: M0A0A0