

Question	Scheme	Marks	AOs
1	Sets $f(-2) = 0 \Rightarrow 2 \times (-2)^3 - 5 \times (-2)^2 + a \times -2 + a = 0$	M1	3.1a
	Solves linear equation $2a - a = -36 \Rightarrow a =$	dM1	1.1b
	$\Rightarrow a = -36$	A1	1.1b

(3 marks)

Notes:

M1: Selects a suitable method given that $(x + 2)$ is a factor of $f(x)$

Accept either setting $f(-2) = 0$ or attempted division of $f(x)$ by $(x + 2)$

dM1: Solves linear equation in a . Minimum requirement is that there are two terms in ' a ' which must be collected to get $..a = .. \Rightarrow a =$

A1: $a = -36$