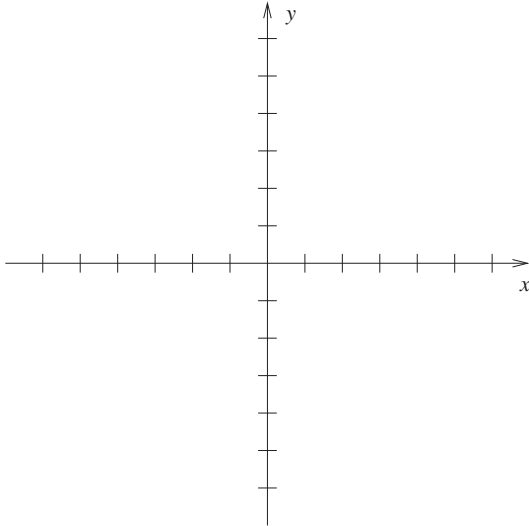


Note that there are two problems, the second of which is on page 2.

1. Polynomial $P(x)$ has degree 3 and has zeros at $x = 1$, $x = 2$, and $x = -2$. It also includes the point $(0, 2)$. Determine $P(x)$ and sketch its graph.



2. Match the equation with the graph.

(a) $y = (x - 1)(x + 2)^2(x - 2)$ _____

(b) $y = (x - 1)(x + 2)^3(x - 2)$ _____

(c) $y = -x(x + 3)(x - 2)$ _____

(d) $y = -x(x + 3)^2(x - 2)$ _____

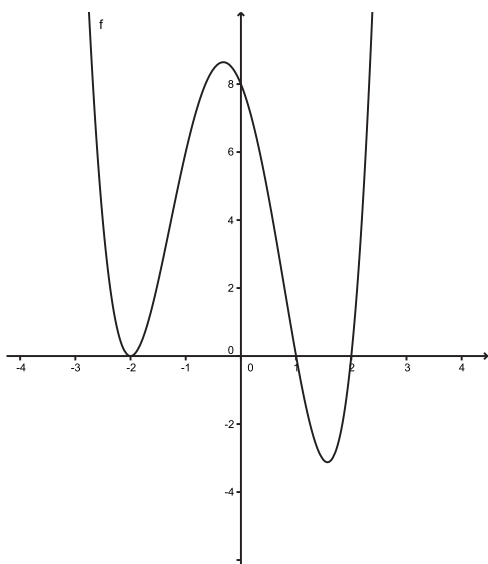


Figure 1:

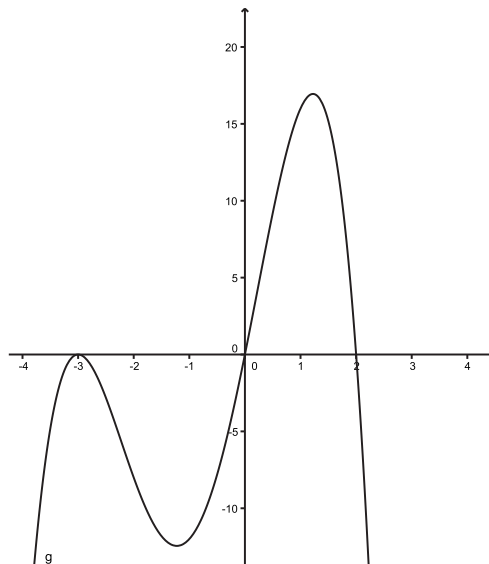


Figure 2:

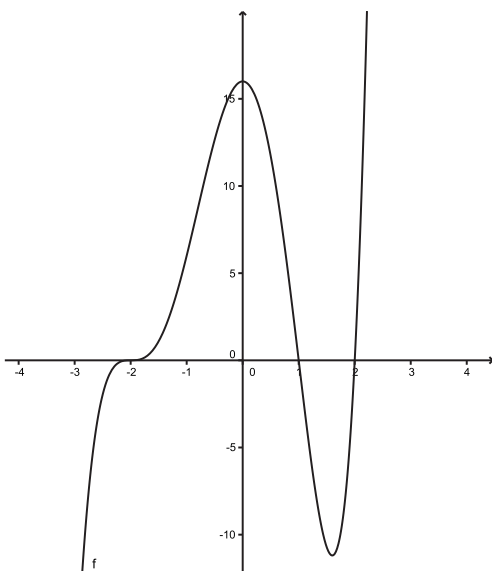


Figure 3:

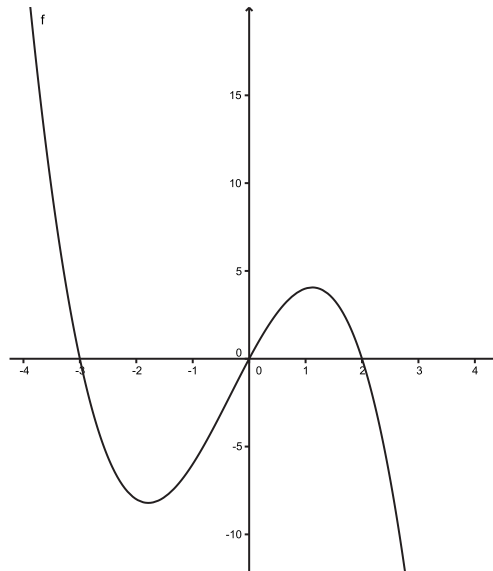


Figure 4: