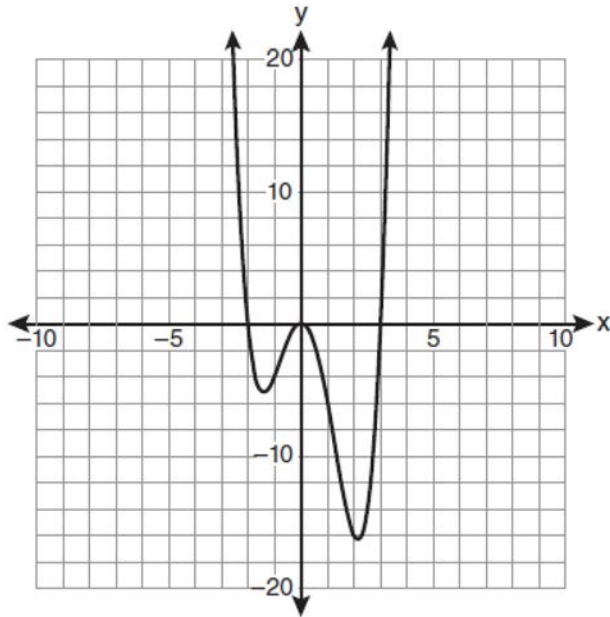
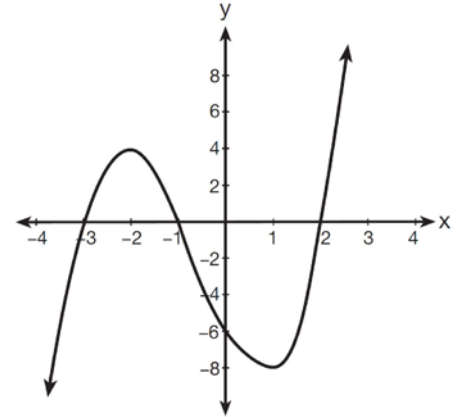


A2.A.50: Solving Polynomial Equations: Approximate the solution to polynomial equations of higher degree by inspecting the graph

- 1 The graph of $y = f(x)$ is shown below.



- 2 What are the zeros of the polynomial function graphed below?

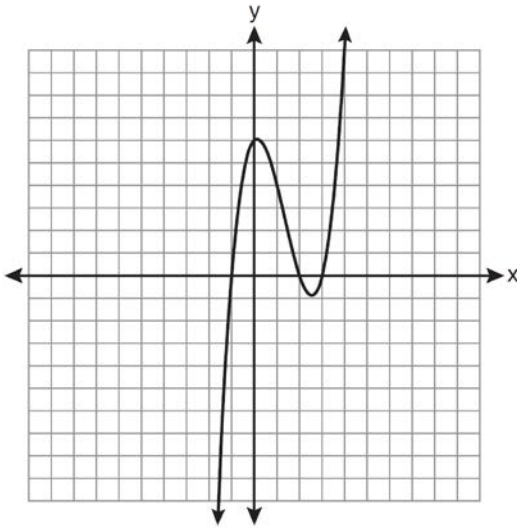


- 1) $\{-3, -1, 2\}$
- 2) $\{3, 1, -2\}$
- 3) $\{4, -8\}$
- 4) $\{-6\}$

Which set lists all the real solutions of $f(x) = 0$?

- 1) $\{-3, 2\}$
- 2) $\{-2, 3\}$
- 3) $\{-3, 0, 2\}$
- 4) $\{-2, 0, 3\}$

- 3 The graph of $y = x^3 - 4x^2 + x + 6$ is shown below.



What is the product of the roots of the equation

$$x^3 - 4x^2 + x + 6 = 0?$$

- 1) -36
 - 2) -6
 - 3) 6
 - 4) 4
- 4 How many negative solutions to the equation
- $$2x^3 - 4x^2 + 3x - 1 = 0$$
- exist?
- 1) 1
 - 2) 2
 - 3) 3
 - 4) 0

A2.A.50: Solving Polynomial Equations: Approximate the solution to polynomial equations of higher degree by inspecting the graph**Answer Section**

1 ANS: 4 REF: 061005a2

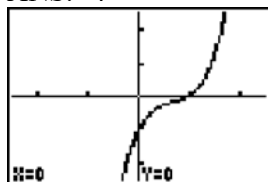
2 ANS: 1 REF: 081501a2

3 ANS: 2

The roots are $-1, 2, 3$.

REF: 081023a2

4 ANS: 4



REF: 061222a2