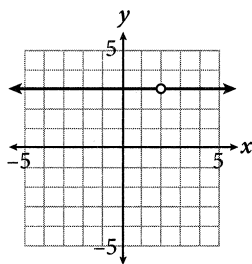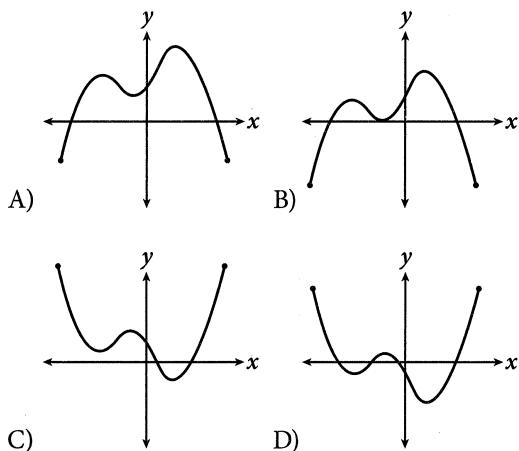# PRACTICE SET

Easy

1. If a function $p(x)$ has four distinct zeros, which of the following could represent the entire graph of p in a standard coordinate plane?

A)

B)

C)

D)

2. Which of the following rational functions could represent the graph shown?

   A) $r(x) = 3$

   B) $r(x) = \dfrac{x-3}{x-2}$

   C) $r(x) = \dfrac{2}{x-3}$

   D) $r(x) = \dfrac{3x-6}{x-2}$

3. For which values of x is the expression
$$\frac{3x+6}{3x(4x+8)(x-5)}$$ undefined?

   A) -2

   B) $-2, 5$

   C) $0, -2, 5$

   D) $0, 2, -5$

4. If $y \ne z$, then $\dfrac{xy - zx}{z - y} =$

   A) $-x$

   B) -1

   C) 1

   D) x

5. If Q is the quotient when $(x^2 - 10x - 24)$ is divided by $(x + 2)$ and $x \ne -2$, which of the following represents Q?

   A) $x - 22$

   B) $x - 12$

   C) $x + 12$

   D) $x + 22$

Medium

6. Given that $a \ne \pm\dfrac{1}{2}$, which of the following is equivalent to $\dfrac{2a^2 + 5a - 3}{4a^2 - 1}$?

   A) $\dfrac{2a - 3}{2a + 1}$

   B) $\dfrac{a - 3}{2a - 1}$

   C) $\dfrac{2a + 3}{2a - 1}$

   D) $\dfrac{a + 3}{2a + 1}$