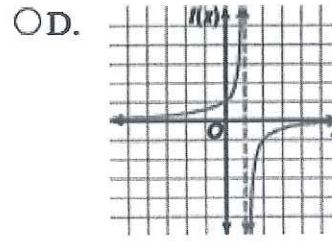
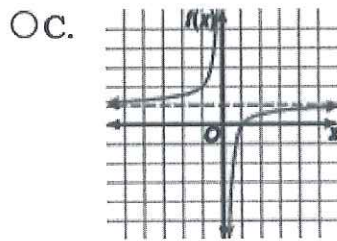
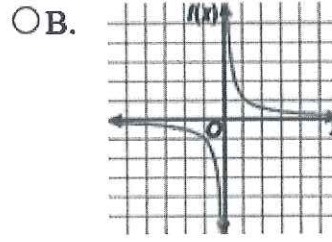
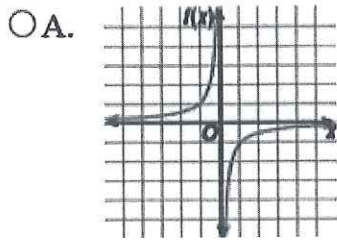


2. What is the graph of  $f(x) = \frac{-1}{x}$ ?



Hint

3. If  $y$  varies directly as  $x$  and  $y = 6$  when  $x = 2$ , find  $y$  when  $x = 5$ .

A. 2.4

B. 6

C. 15

D.  $\frac{5}{3}$

4. Simplify  $\frac{2x^2 - 5x - 3}{4x^2 - 20x} \div \frac{2x^2 - 4x - 6}{x^2 + x}$ .

A.  $\frac{x-3}{2(x+1)}$

B.  $\frac{2x+1}{8(x-5)}$

C.  $\frac{x(2x+1)}{x+1}$

D.  $\frac{x+1}{4(x-5)}$

Hint

5. Simplify  $\frac{1}{2a+2b} + \frac{a}{a+b}$ .

A.  $\frac{2a+1}{2a+2b}$

B.  $\frac{1}{2b}$

C.  $\frac{a+1}{3a+3b}$

D.  $\frac{a+1}{2a+2b}$

6. Solve  $11b = 132$ .

A.  $b = -1452$

B.  $b = -12$

C.  $b = 12$

D.  $b = 1452$

Hint

7. Simplify  $\frac{\frac{x^2}{x^2-9y^2}}{\frac{2x}{x+3y}}$ .

A.  $\frac{x}{2(x-3y)}$

B.  $\frac{1}{2(x-3y)}$

C.  $\frac{1}{2(x+3y)}$

D.  $\frac{x}{2(x+3y)}$

8. Which of the following is the LCM of  $33s^4$ ,  $11s^2t^2q$ , and  $22s^3q^2$ .

A.  $66s^4q^2$

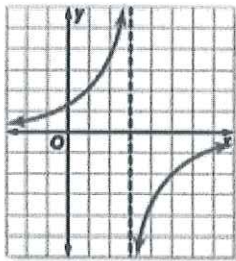
B.  $33s^4q^2$

C.  $33s^4t^2q^2$

D.  $66s^4t^2q^2$

Hint

9. What is the equation of the vertical asymptote in the figure?



A.  $x = 0$

B.  $x = \pm\infty$

C.  $x = 3$

D.  $y = 0$

13. Solve  $\frac{1}{3x} - \frac{2}{7x} > \frac{1}{3}$ .

A.  $0 < x < \frac{1}{7}$

B.  $x > \frac{1}{7}$

C.  $x < \frac{1}{7}$

D.  $-\frac{1}{7} < x < \frac{1}{7}$

Answers:

- 2. Answer: A See page 459, Example 2.
- 3. Answer: C See page 466, Example 1.
- 4. Answer: B See page 445, Example 5b.
- 5. Answer: A See pages 451-452.
- 6. Answer: C See page 20.
- 7. Answer: A See page 446, Example 6.
- 8. Answer: D See page 450, Example 1.
- 9. Answer: C See page 459, Example 2.
- 13. Answer: A See page 483, Example 5.

