- 1. Which of the following is the slope of a line that is perpendicular to the line 3x + 5y = 20?
- (A) -3/5
- (B) 3/5
- (C) 5/3
- (D) None of the above.

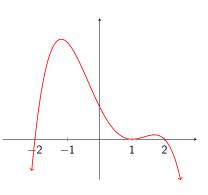
2. The graph of a function *f* is depicted to the right. Which of the following could be a formula for *f*?

(A) 
$$f(x) = -(x-1)(x^2-4)$$

(B) 
$$f(x) = (x-1)(x^2-4)$$

(C) 
$$f(x) = -(x-1)^2(x^2-4)$$

(D) 
$$f(x) = (x-1)^2(x^2-4)$$



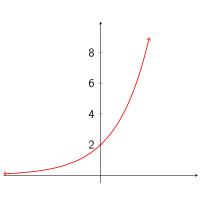
- 3. Which of the following is equal to  $\log_5\left(\frac{1}{25}\right)$ ?
- (A) -2
- (B) 1/2
- (C) -1/2
- (D) None of the above.

## 4. The graph of the function *f* defined by

$$f(x) = ce^x$$

is depicted to the right. What is *c*?

- (A) 1
- (B) 2
- (C) 3
- (D) None of the above



- 5. Which of the following is equal to  $8^{3 \log_8(2)}$ ?
- (A) 1
- (B) 6
- (C) 8
- (D) None of the above.