Classroom Voting Questions: Calculus I

2.3 The Derivative Function

1. Which of the following graphs is the graph of the derivative of the function shown in Figure 2.6?

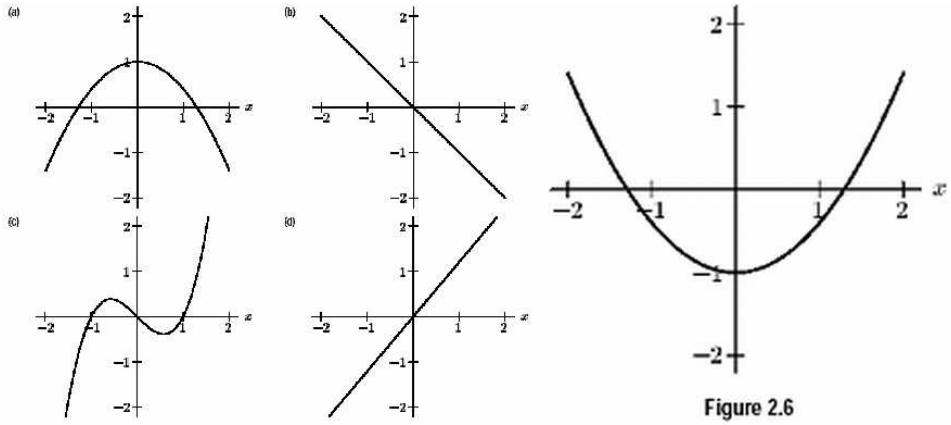


Figure 2.6

2. Which of the following graphs is the graph of the derivative of the function shown in Figure 2.8?

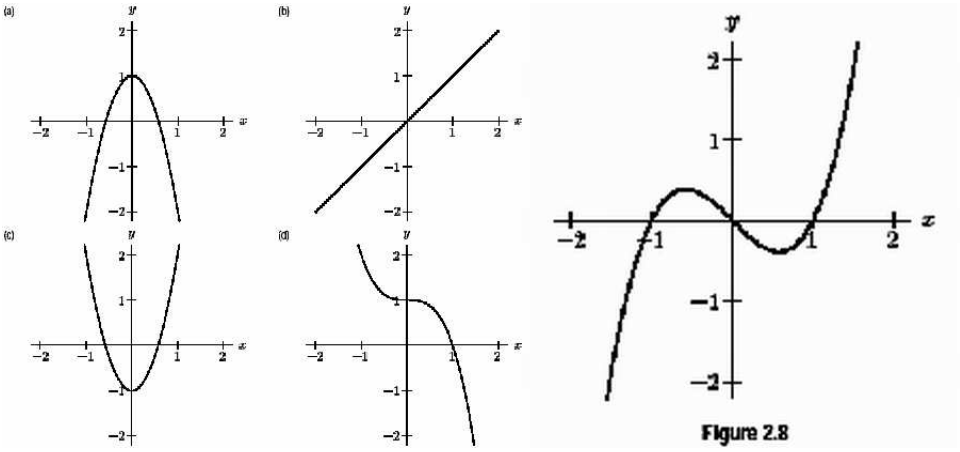


Figure 2.8

3. Which of the following graphs is the graph of the derivative of the function shown in Figure 2.9?

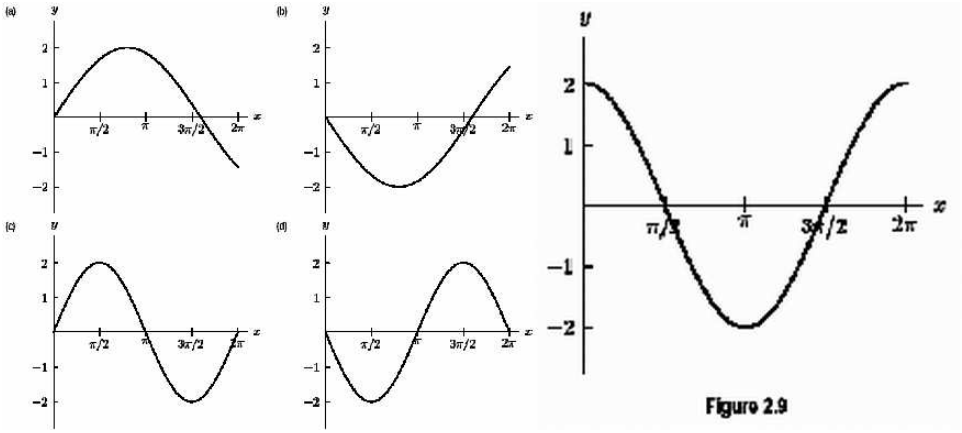


Figure 2.9

4. Which of the following graphs is the graph of the derivative of the function shown in Figure 2.10?

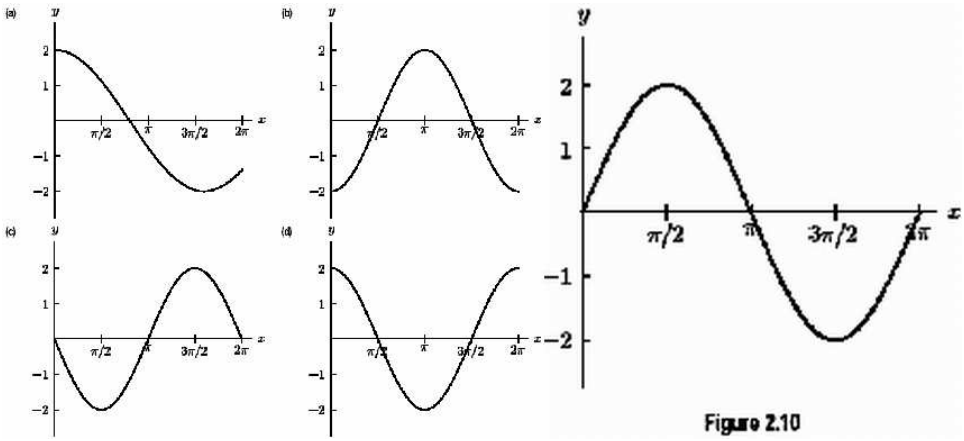


Figure 2.10

5. Which of the following graphs is the graph of the derivative of the function shown in Figure 2.11?

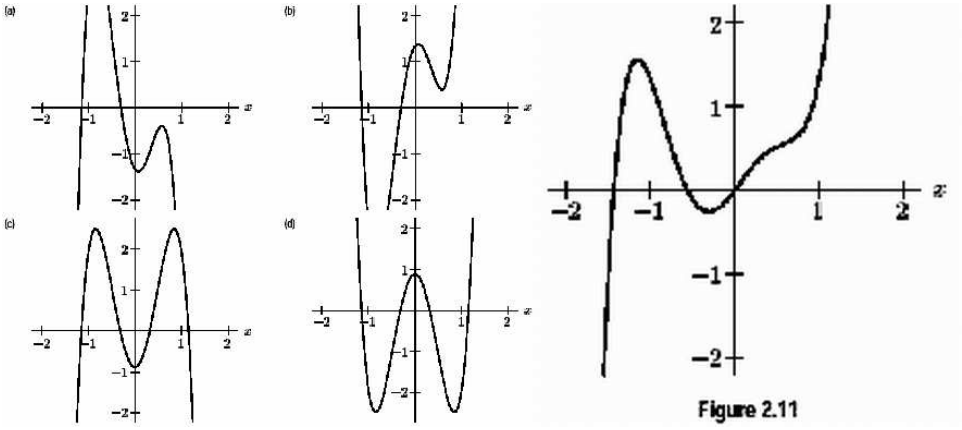
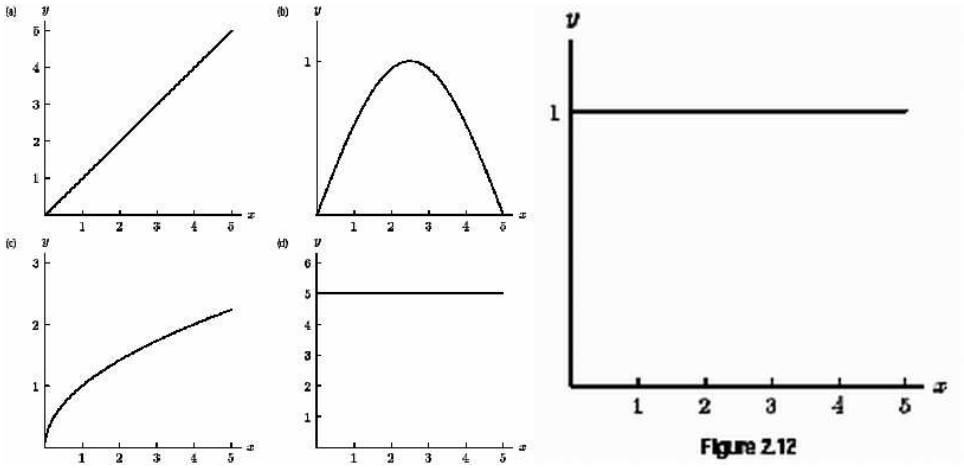
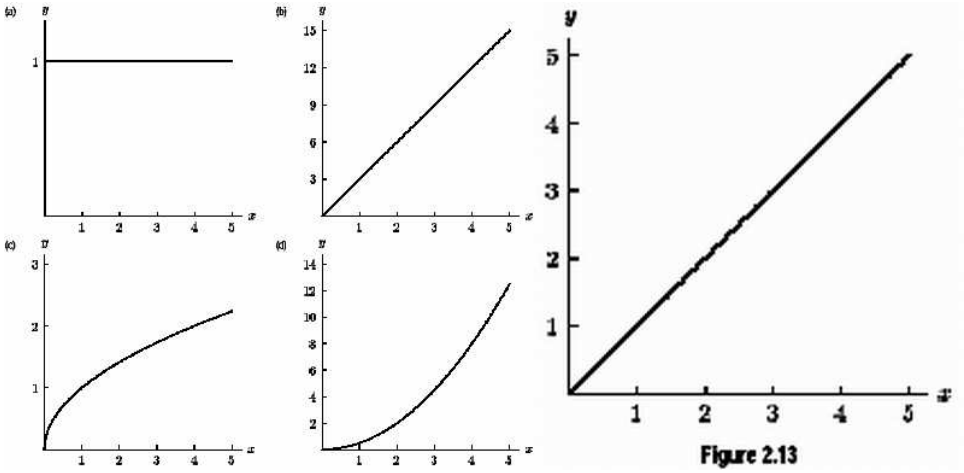


Figure 2.11

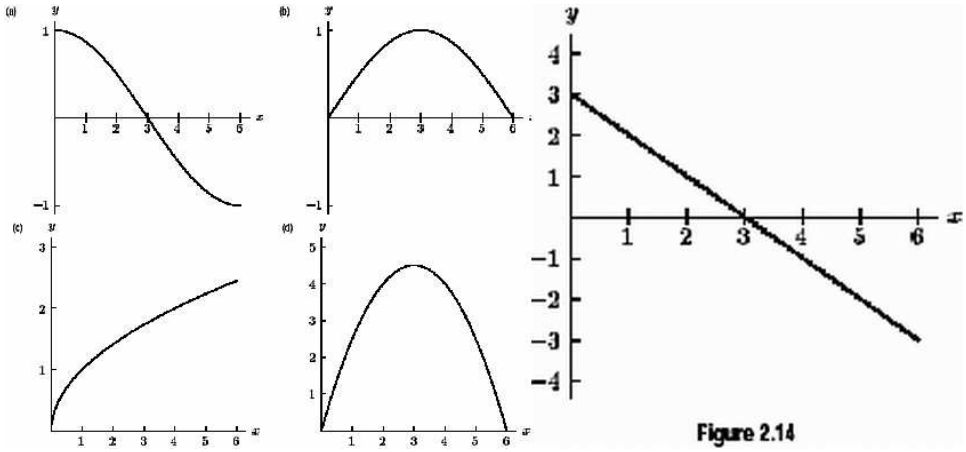
6. The graph in Figure 2.12 is the derivative of which of the following functions?



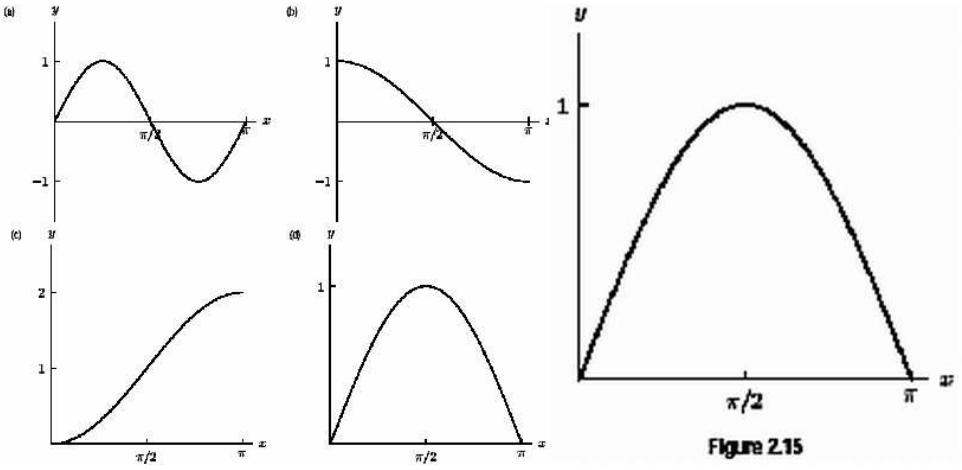
7. The graph in Figure 2.13 is the derivative of which of the following functions?



8. The graph in Figure 2.14 is the derivative of which of the following functions?



9. The graph in Figure 2.15 is the derivative of which of the following functions?



10. **True or False:** If $f'(x) = g'(x)$ then $f(x) = g(x)$.

    (a) True, and I am very confident

    (b) True, but I am not very confident

    (c) False, but I am not very confident

    (d) False, and I am very confident

11. Let $f(x) = 2x^3 + 3x^2 + 1$. True or false: On the interval $(-\infty, -1)$, the function f is increasing.

    (a) True, and I am very confident.

    (b) True, but I am not very confident.

    (c) False, but I am not very confident.

    (d) False, and am very confident.