Slope of tangent
$= f'(-1) \approx 2$

Which of the following graphs (a)-(d) could represent the slope at every point of the function graphed in Figure 2.6?
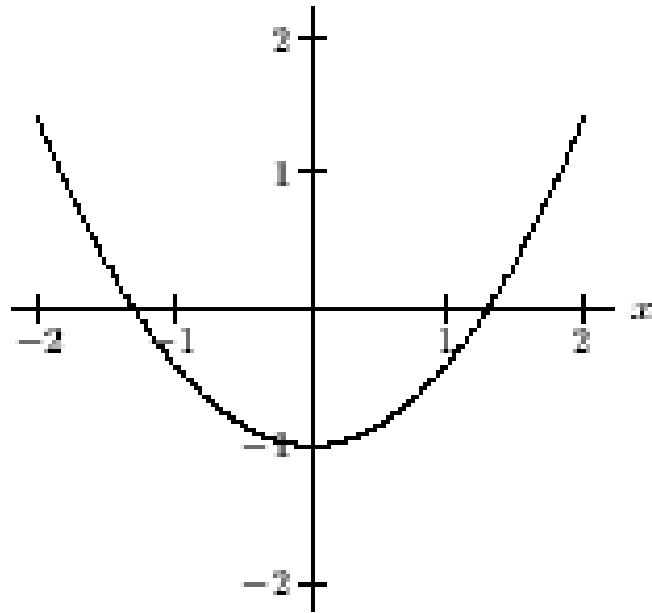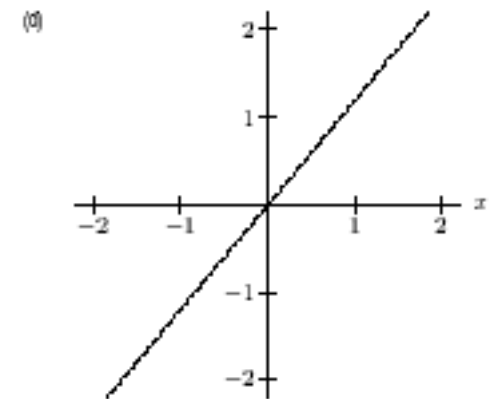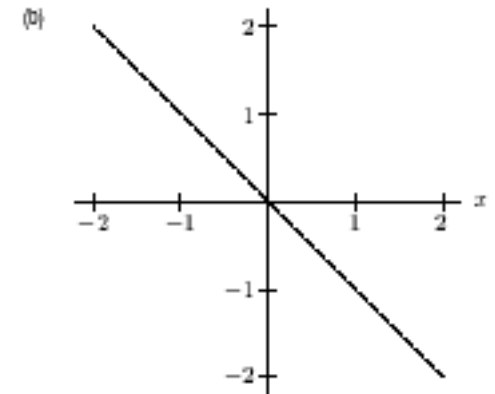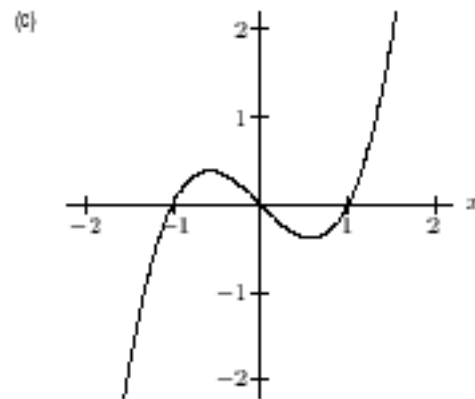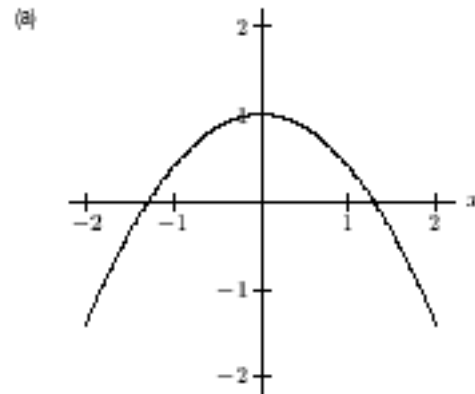

(a)

(b)

(c)

(d)

Figure 2.6

Which of the following graphs (a)-(d) could represent the slope at every point of the function graphed in Figure 2.7?

Figure 2.7

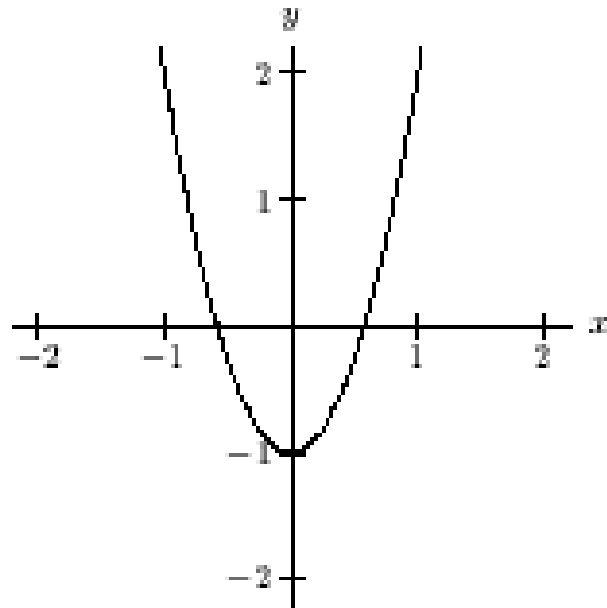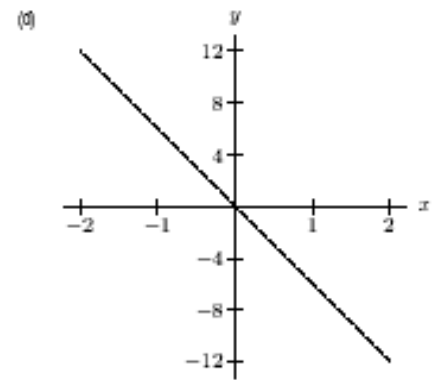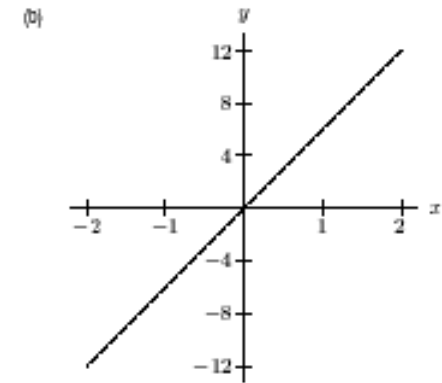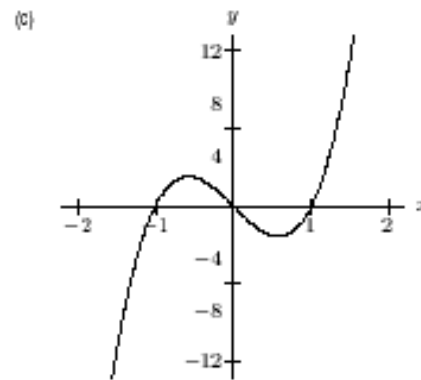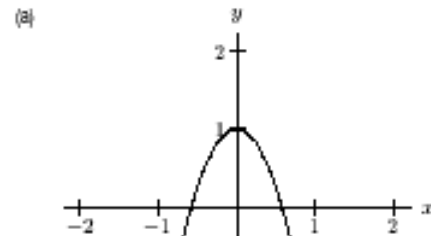Which of the following graphs (a)-(d) could represent the slope at every point of the function graphed in Figure 2.8?

Figure 2.8

Which of the following graphs (a)-(d) could represent the slope at every point of the function graphed in Figure 2.9?

Figure 2.9

Which of the following graphs (a)-(d) could represent the slope at every point of the function graphed in Figure 2.10?

Figure 2.10
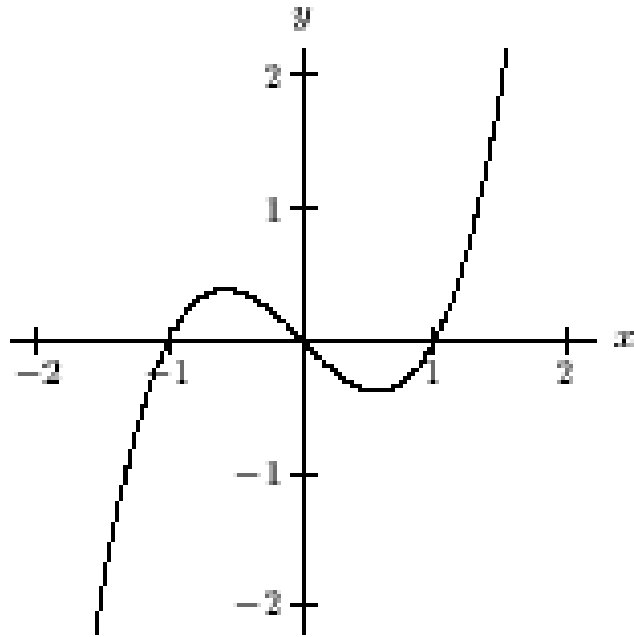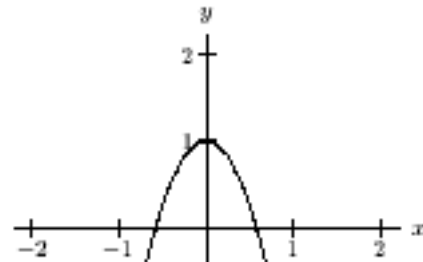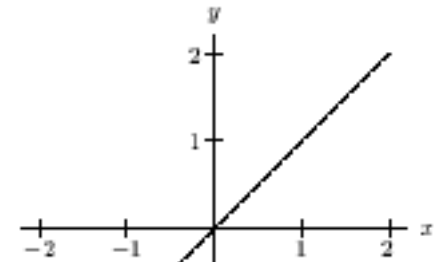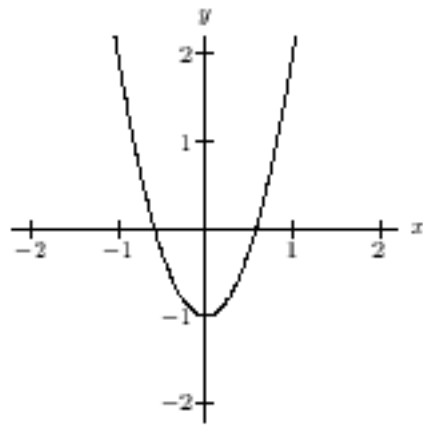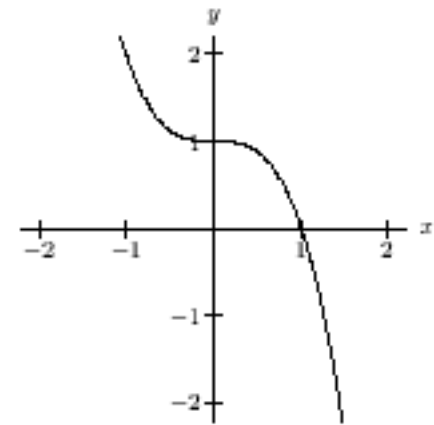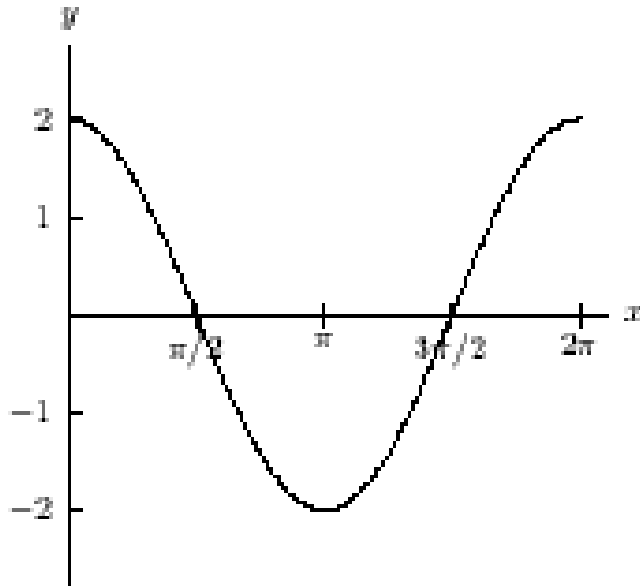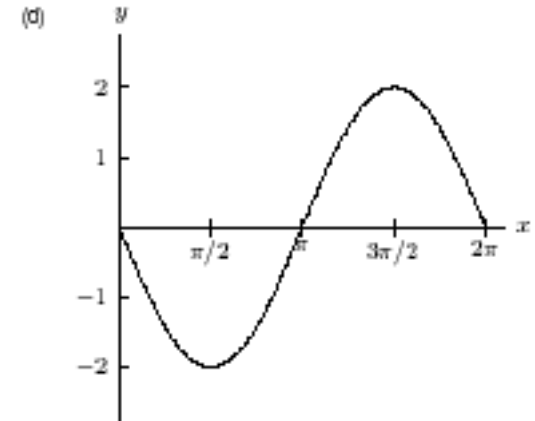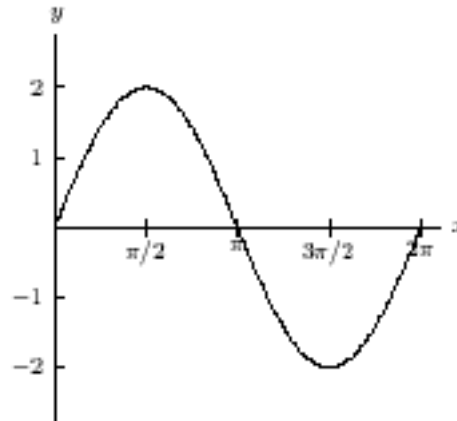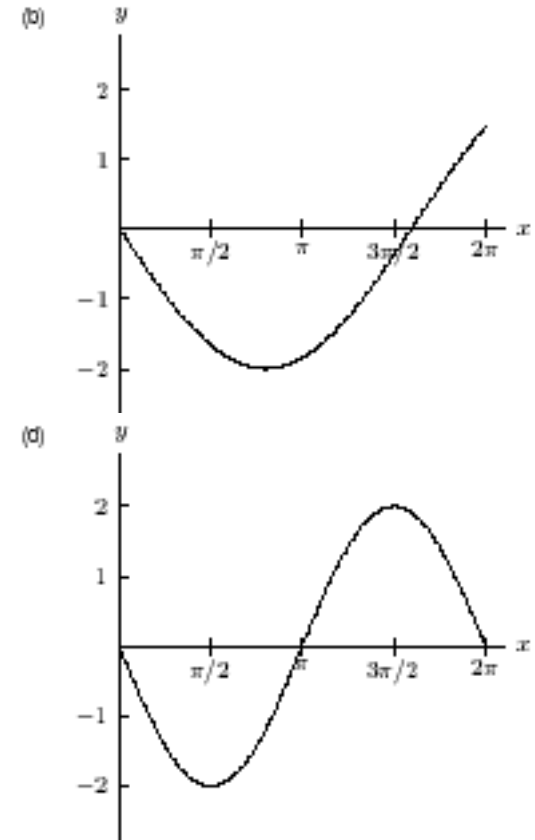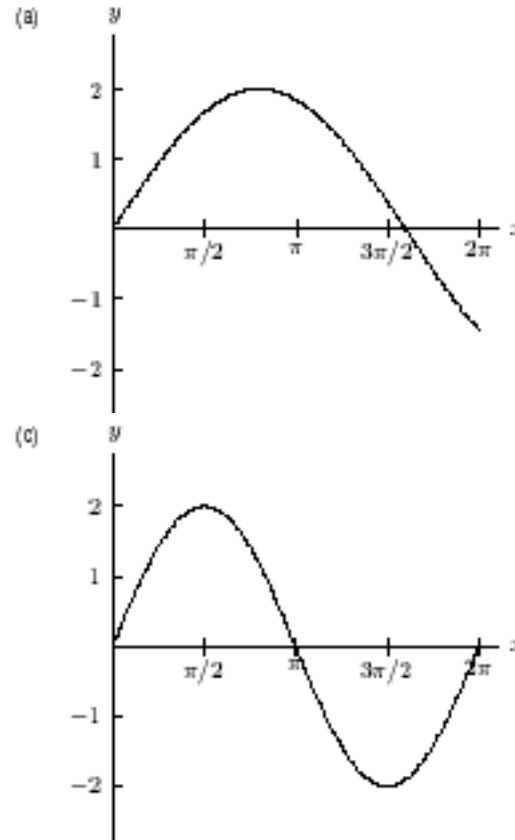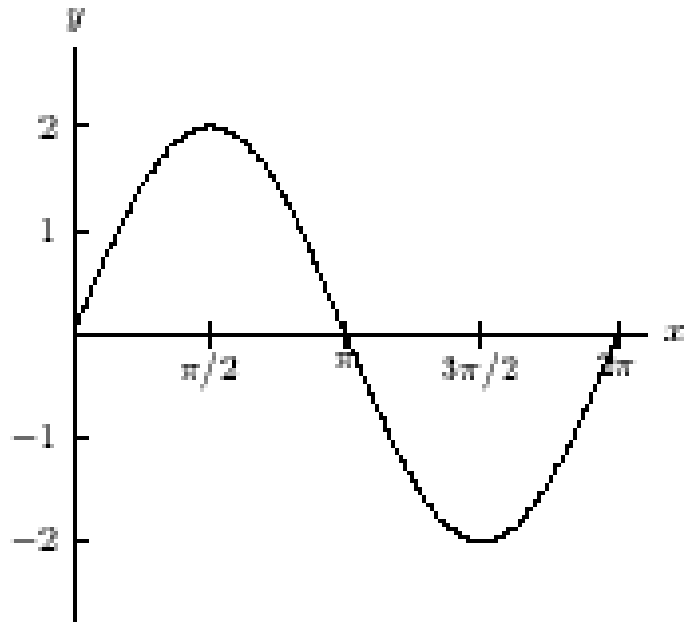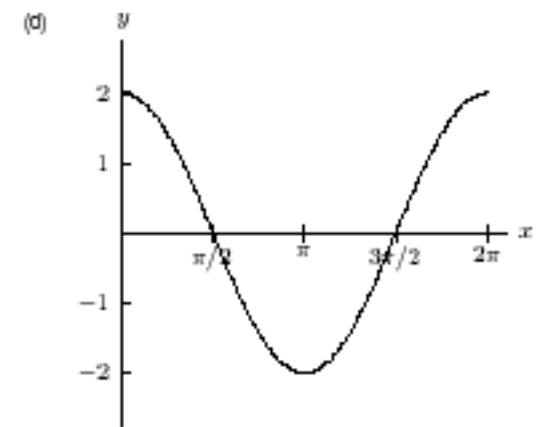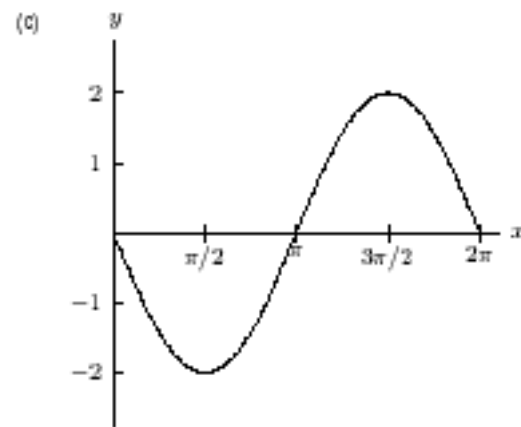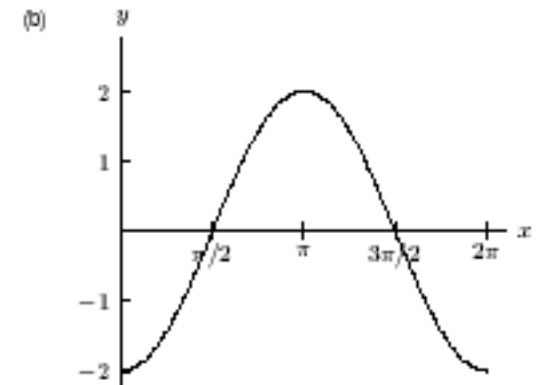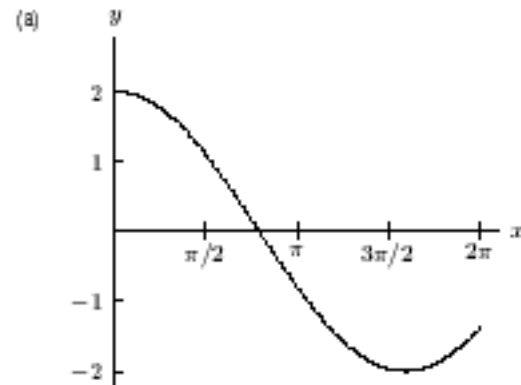
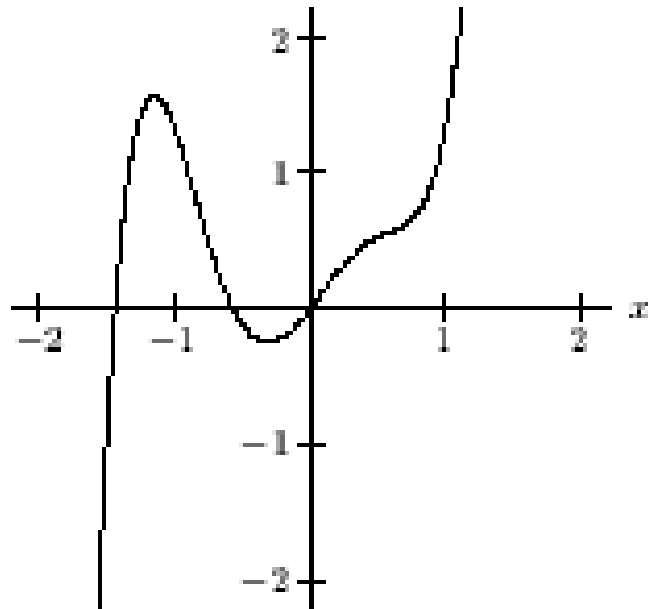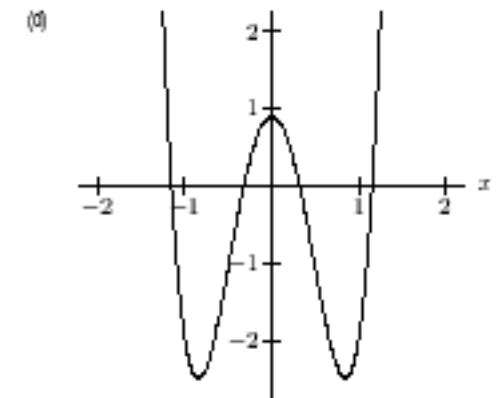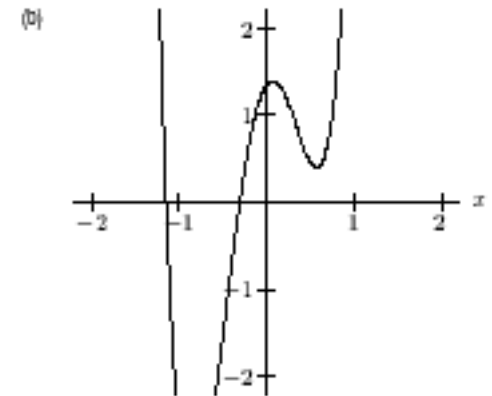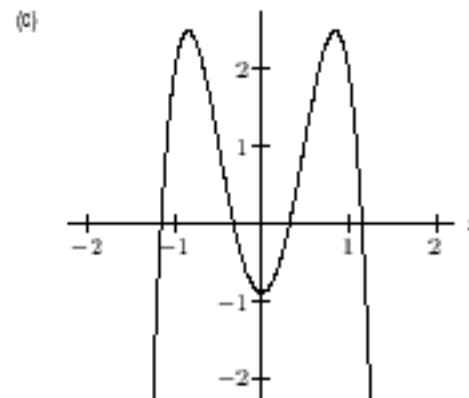Which of the following graphs (a)-(d) could represent the slope at every point of the function graphed in Figure 2.11?

Figure 2.11

(a)

(b)

(c)
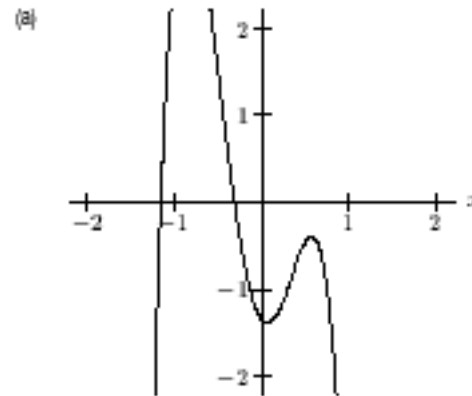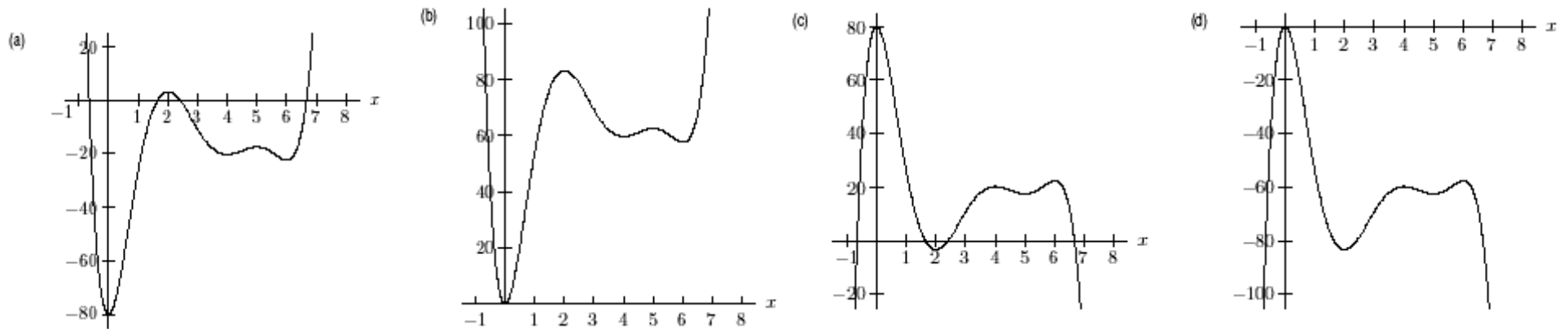
(d)

Suppose $f'(x) < 0$, for $0 < x < 2$, for $4 < x < 5$, and for $6 < x$.

$f'(x) > 0$, for $x < 0$, for $2 < x < 4$, and for $5 < x < 6$.

Which of the graphs (a)-(d) could be the graph of $f(x)$?

Which of the following graphs (a)-(d) could represent the function whose slope at every point is graphed in Figure 2.12?
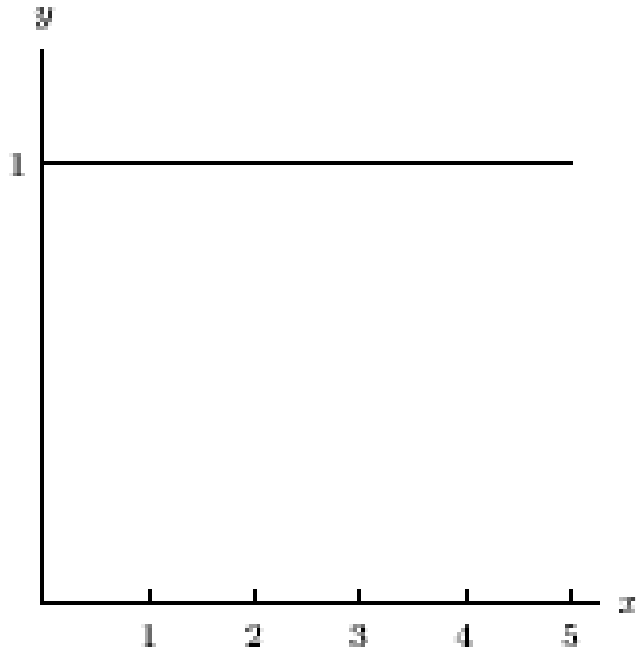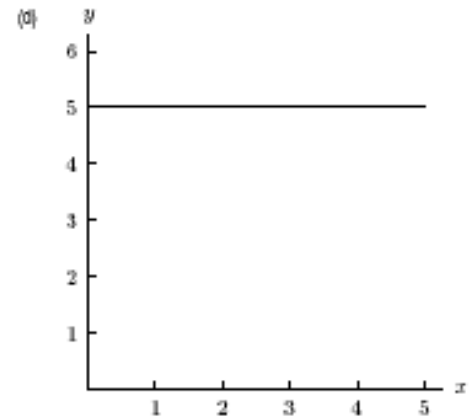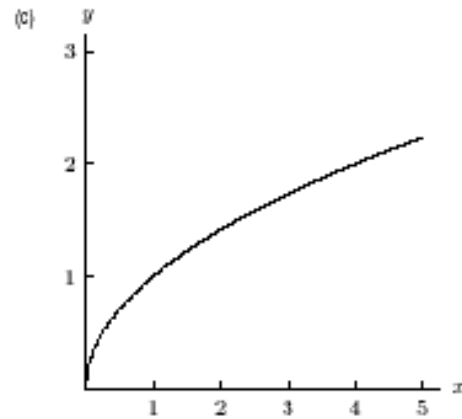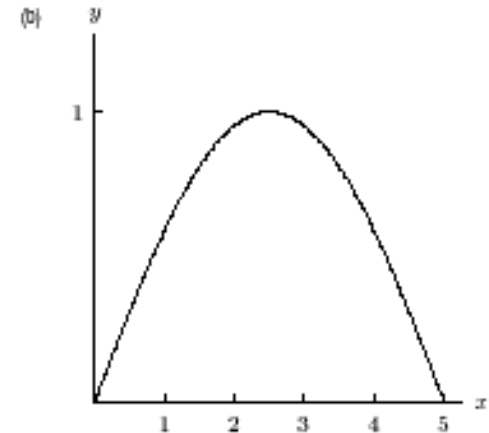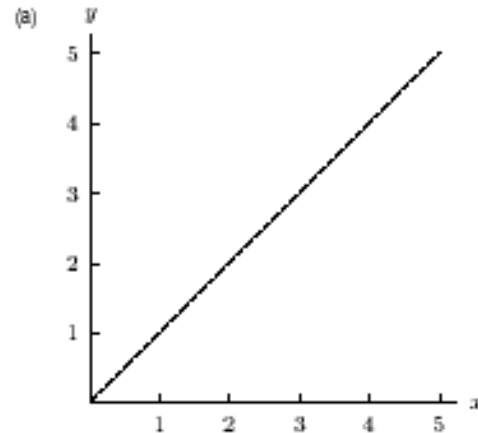

Figure 2.12

Which of the following graphs (a)-(d) could represent the
the function whose slope at every point is graphed in
Figure 2.13?

Figure 2.13

Which of the following graphs (a)-(d) could represent the function whose slope at every point is graphed in Figure 2.14?

Figure 2.14

Which of the following graphs (a)-(d) could represent the function whose slope at every point is graphed in Figure 2.15?
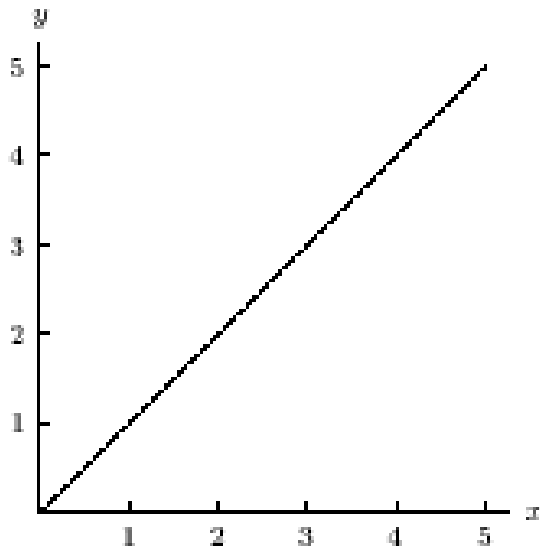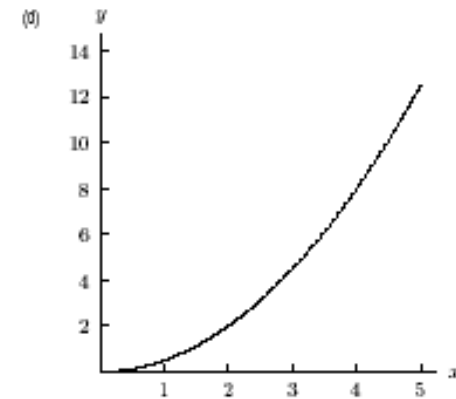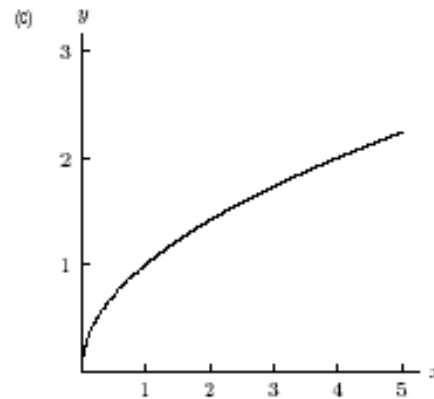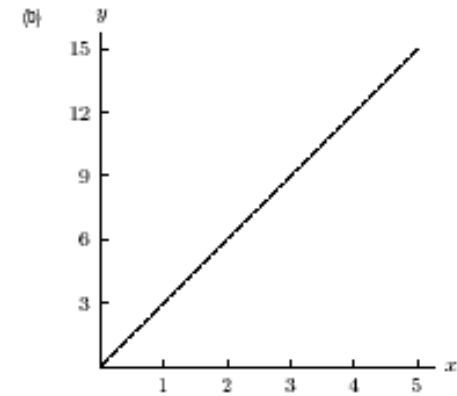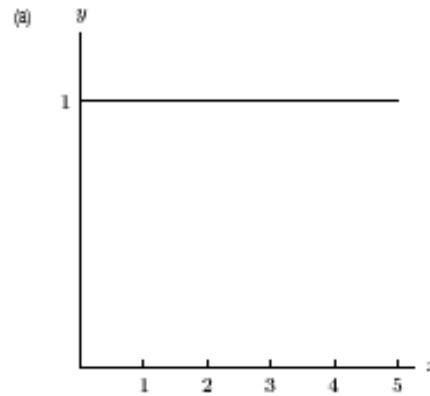

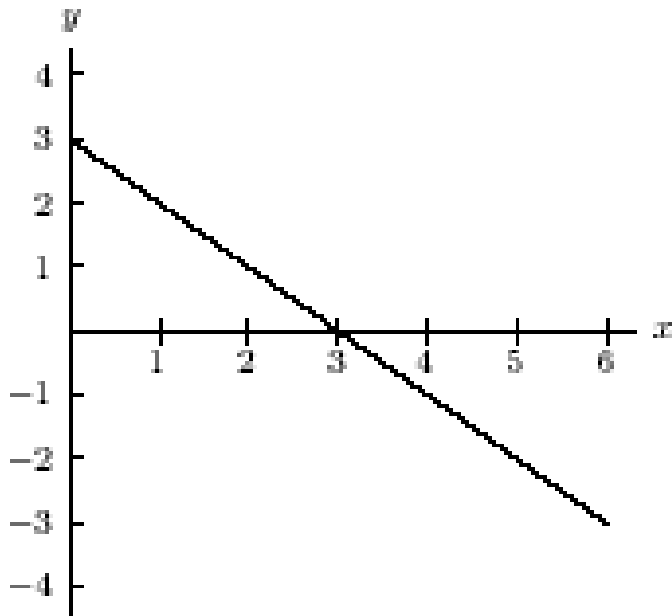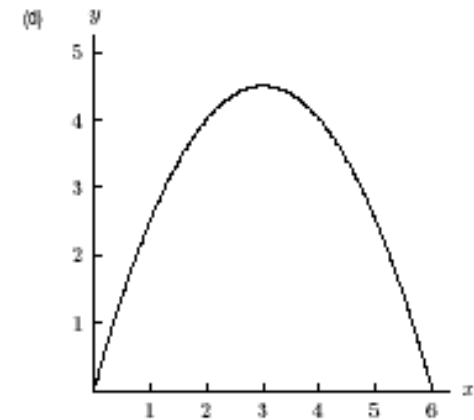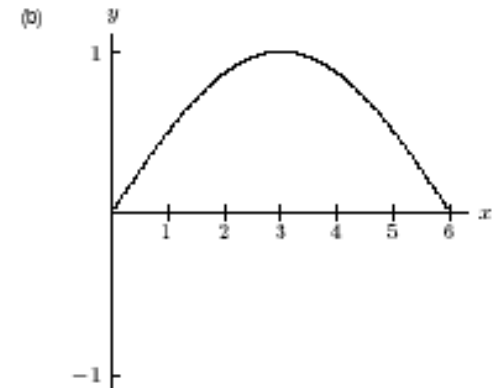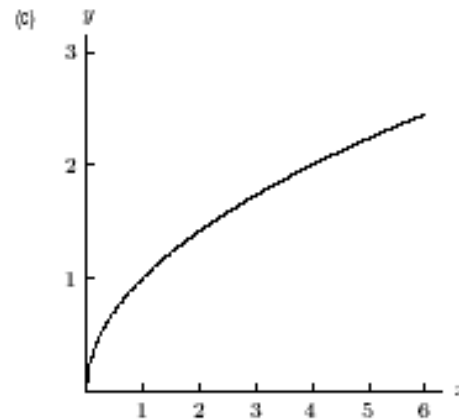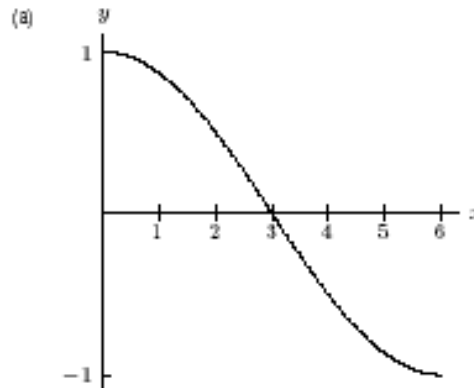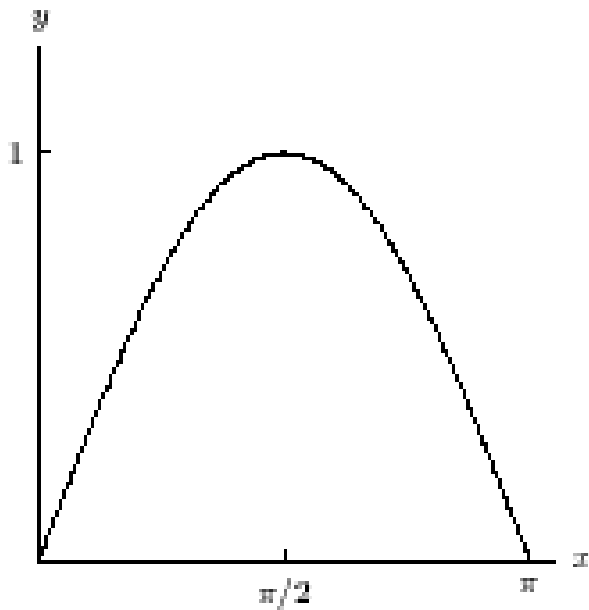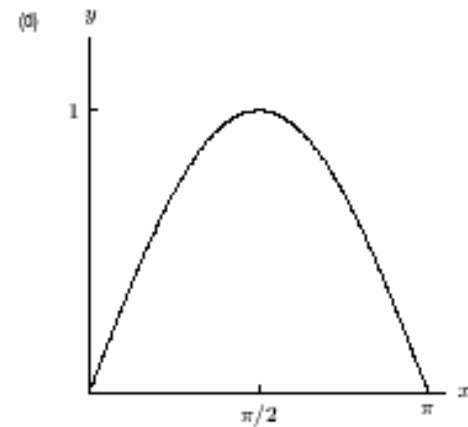Figure 2.15

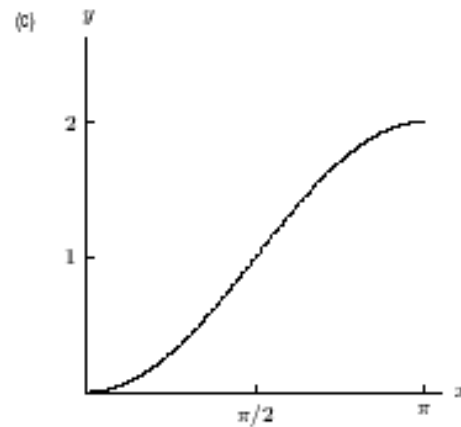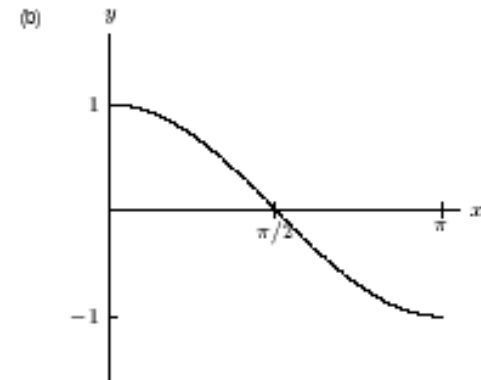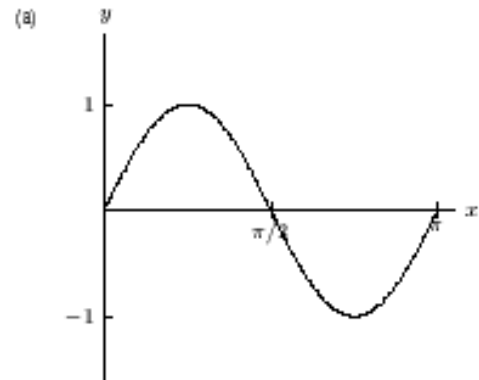Which of the following is a graph of a function that is equal to its own derivative, that is, $f'(x) = f(x)$.

(a)

(b)

(c)

(d)
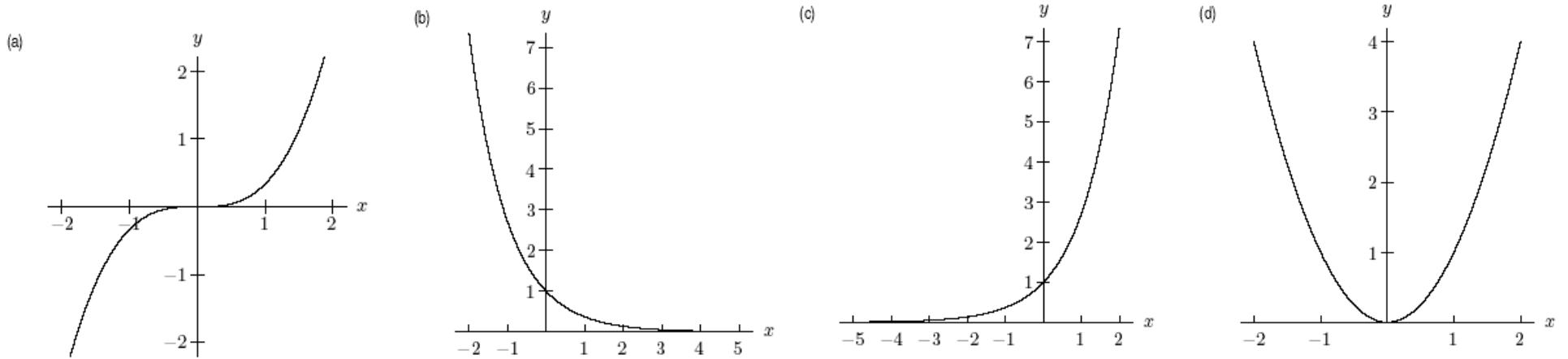
Which of the following is a graph of a function that is equal to the negative of its own derivative, that is, $f(x) = -f'(x)$.

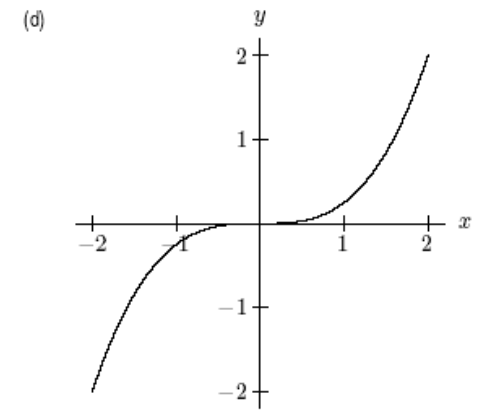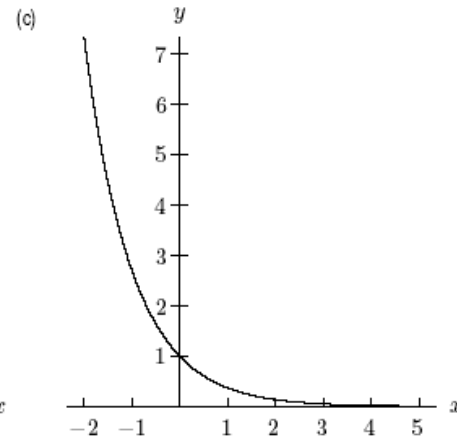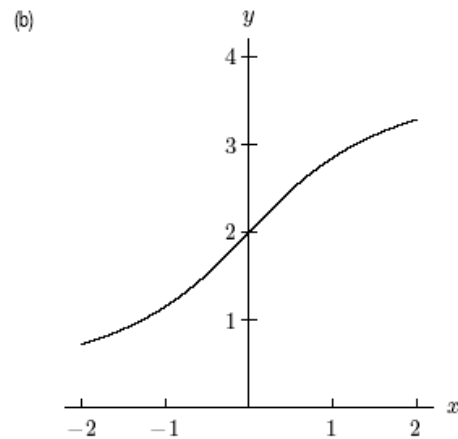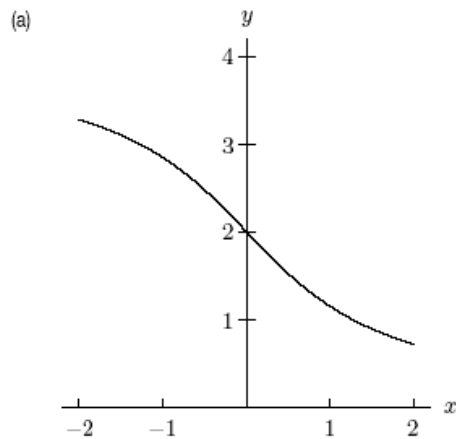- **21.** Given the numerical values shown, find approximate values for the derivative of f at each of the x-values given. Where is the rate of change positive? Where is it negative? Where does the rate of change seem to be greatest?

x	$f(x)$
0	18
1	13
2	10
3	9
4	9
5	11
6	15
7	21
8	30