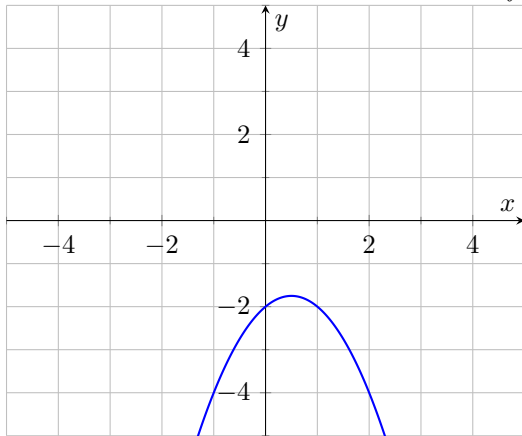1. Find the interval on which the function $f(x)$ graphed below is decreasing.

A. The function $f(x)$ is decreasing on $(0.5, \infty)$.

B. The function $f(x)$ is decreasing on $(-\infty, -3) \cup (1, \infty)$

C. The function $f(x)$ is decreasing on $(-\infty, 1) \cup (-3, \infty)$

D. The function $f(x)$ is decreasing on $(-\infty, -0.5)$.

E. The function $f(x)$ is decreasing on $(1, -3)$

F. The function $f(x)$ is decreasing on $(-\infty, 0.5)$.

G. The function $f(x)$ is decreasing on $(-3, 1)$

H. The function $f(x)$ is decreasing on $(-0.5, \infty)$.

2. Use the graph of the linear function to find interval(s) where the function negative.
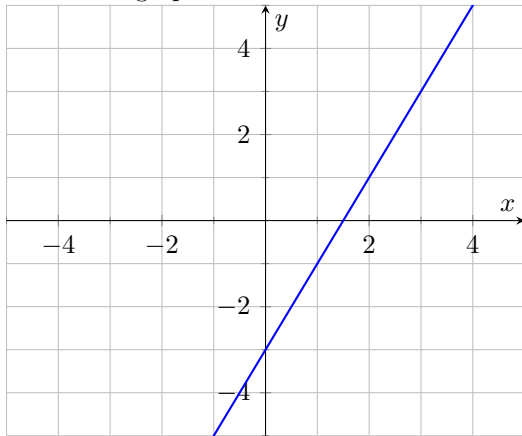
A. The function $f(x)$ is negative on $(-3, \infty)$

B. The function $f(x)$ is negative on $\mathbb{R}$

C. The function $f(x)$ is negative on $(-\infty, -3)$

D. The function $f(x)$ is negative on $\emptyset$

E. The function $f(x)$ is negative on $(-\infty, 1.5)$

F. The function $f(x)$ is negative on $(1.5, \infty)$

G. The function $f(x)$ is negative on $(-\infty, 1.5) \cup (-3, \infty)$

H. The function $f(x)$ is negative on $(-\infty, -3) \cup (1.5, \infty)$

3. Find the interval on which the function $f(x) = -x^2 - 2x + 3$ is positive.

A. The function $f(x)$ is positive on $(-3, 3)$.

B. The function $f(x)$ is positive on $(-\infty, -3) \cup (-1, \infty)$.

C. The function $f(x)$ is positive on $(-\infty, 3) \cup (-1, \infty)$.

D. The function $f(x)$ is positive on $(3, -3)$.

E. The function $f(x)$ is positive on $(-3, 1)$.

F. The function $f(x)$ is positive on $(-1, 1)$.

G. The function $f(x)$ is positive on $(-\infty, -3) \cup (1, \infty)$.

H. The function $f(x)$ is positive on $(-\infty, 3) \cup (1, \infty)$.

4. Use the graph of the linear function to find interval(s) where the function $f(x) = 2x - 1$ is negative.

A. The function $f(x)$ is negative on $(-\infty, 0.5)$

B. The function $f(x)$ is negative on $\mathbb{R}$

C. The function $f(x)$ is negative on $(0.5, \infty)$

D. The function $f(x)$ is negative on $(-\infty, -1) \cup (0.5, \infty)$

E. The function $f(x)$ is negative on $(-\infty, 0.5) \cup (-1, \infty)$

F. The function $f(x)$ is negative on $(-1, \infty)$

G. The function $f(x)$ is negative on $(-\infty, -1)$

H. The function $f(x)$ is negative on $\emptyset$

5. Find interval(s) on which the function $f(x) = 0.5x^2 + 3x + 1$ is decreasing.

A. The function $f(x)$ is decreasing on $(3, \infty)$.

B. The function $f(x)$ is decreasing on $(-5, -1)$

C. The function $f(x)$ is decreasing on $(-1, -5)$

D. The function $f(x)$ is decreasing on $(-\infty, 3)$.

E. The function $f(x)$ is decreasing on $(-\infty, -1) \cup (-5, \infty)$

F. The function $f(x)$ is decreasing on $(-\infty, -5) \cup (-1, \infty)$

G. The function $f(x)$ is decreasing on $(-\infty, -3)$.

H. The function $f(x)$ is decreasing on $(-3, \infty)$.

6. Find the interval(s) where the absolute value function $f(x) = -2|x + 1| + 1$ is positive.

A. The function $f(x)$ is positive on $(-\infty, -0.5) \cup (-1.5, \infty)$

B. The function $f(x)$ is positive on $(-0.5, 0) \cup (-1.5, 0)$

C. The function $f(x)$ is positive on $(-0.5, -1.5)$

D. The function $f(x)$ is positive on $(0, -0.5) \cup (0, -1.5)$

E. The function $f(x)$ is positive on $\mathbb{R}$.

F. The function $f(x)$ is positive on $(-1.5, -0.5)$

G. The function $f(x)$ is positive on $(0, -1)$.

H. The function $f(x)$ is positive on $(-\infty, -1.5) \cup (-0.5, \infty)$

7. Find the interval(s) where the absolute value function $f(x) = 2|x - 2| - 2$ is negative.

A. The function $f(x)$ is negative on $(3, 1)$

B. The function $f(x)$ is negative on $(0, 3) \cup (0, 1)$

C. The function $f(x)$ is negative on $(0, 2)$.

D. The function $f(x)$ is negative on $(3, 0) \cup (1, 0)$

E. The function $f(x)$ is negative on $(1, 3)$

F. The function $f(x)$ is negative on $\mathbb{R}$.

G. The function $f(x)$ is negative on $(-\infty, 1) \cup (3, \infty)$

H. The function $f(x)$ is negative on $(-\infty, 3) \cup (1, \infty)$

8. Use the graph of the absolute value function to find intervals where the function positive.
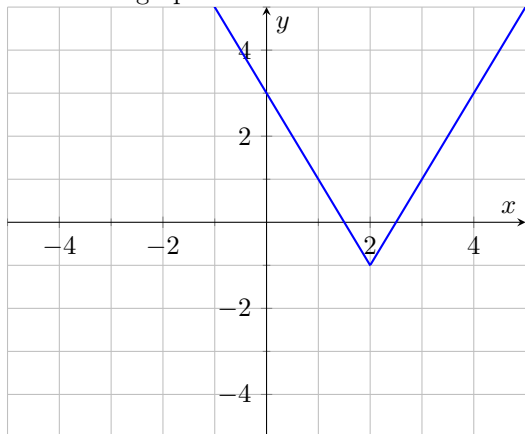
A. The function $f(x)$ is positive on $(2.5, 0) \cup (1.5, 0)$

B. The function $f(x)$ is positive on $(1.5, 2.5)$

C. The function $f(x)$ is positive on $(-\infty, 1.5) \cup (2.5, \infty)$

D. The function $f(x)$ is positive on $(0, 2.5) \cup (0, 1.5)$

E. The function $f(x)$ is positive on $\mathbb{R}$.

F. The function $f(x)$ is positive on $(2.5, 1.5)$

G. The function $f(x)$ is positive on $(-\infty, 2.5) \cup (1.5, \infty)$

H. The function $f(x)$ is positive on $(0, 3)$.