

Functions P-Set

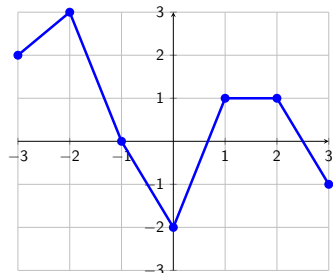
Given each of the following, find $f(-1)$, $f(0)$, and $f(2)$.

1. $f(x) = -5x^2 + 6x - 10$

2.

x	-2	-1	0	1	2
$f(x)$	1	0	-2	2	-1

3.



Determine the domain of each. Write your answer using interval notation.

4. $f(x) = -10x$

5. $g(x) = 3x^2 - 10$

6. $h(x) = \sqrt{6-x}$

7. $j(x) = \frac{10x}{x^2-25}$

8. $k(x) = \frac{x-10}{5-x}$

9. $m(x) = \sqrt{x^2+3}$

10. $n(x) = \sqrt{x-6}$

11. $j(x) = \frac{x^2-36}{x-6}$

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Key:

1. $f(-1) = -21$, $f(0) = -10$, $f(2) = -18$

2. $f(-1) = 0$, $f(0) = -2$, $f(2) = -1$

3. $f(-1) = 0$, $f(0) = -2$, $f(2) = 1$

4. $(-\infty, \infty)$

5. $(-\infty, \infty)$

6. $(-\infty, 6]$

7. $(-\infty, -5) \cup (-5, 5) \cup (5, \infty)$

8. $(-\infty, 5) \cup (5, \infty)$

9. $(-\infty, \infty)$

10. $[6, \infty)$

11. $(-\infty, 6) \cup (6, \infty)$