

## Unit 3 – Lesson 4 &amp; 5 – Graphing Wks

State the domain and range for each function below

1.  $f(x) = x - 5$

2.  $g(x) = x^2 + 2x - 5$

3.  $h(x) = 2x + 4$

4.  $k(x) = \sqrt{3x+1}$

5.  $m(x) = \frac{x+2}{x-4}$

6.  $p(x) = -\sqrt{x-5} + 7$

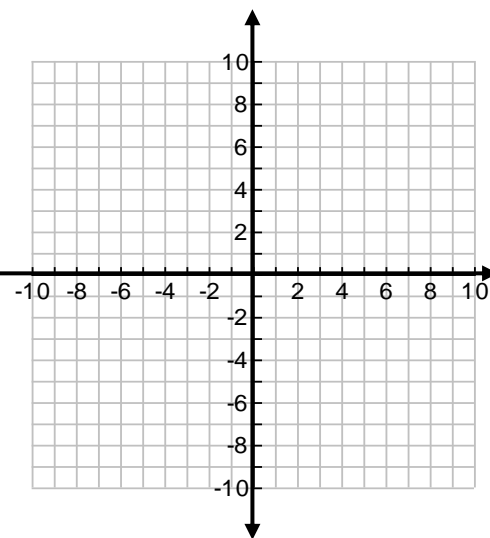
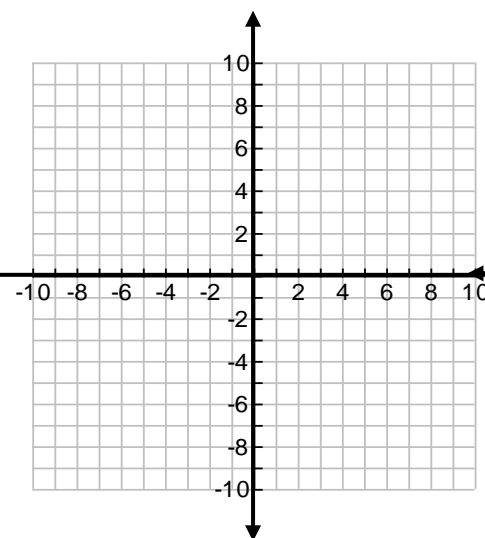
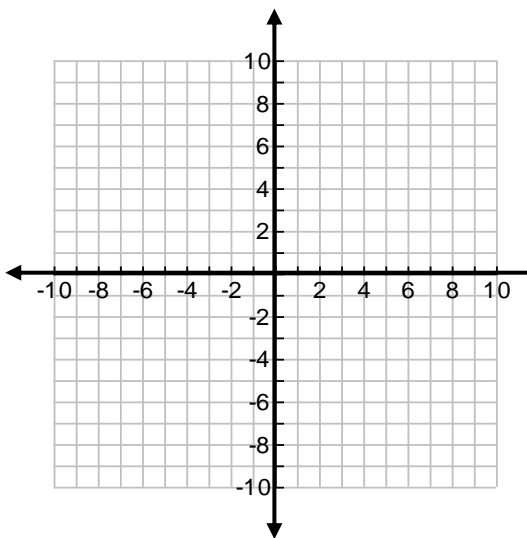
7.  $q(x) = \frac{x-1}{x+2} - 8$

Use the following functions to graph, find the zeros, the domain and range, any asymptotes and holes, interval of increase and decrease, and end behavior for each composition.

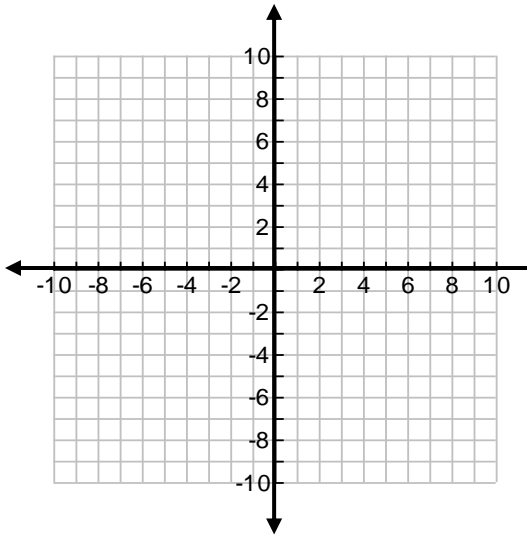
$k(x) = \sqrt{3x+1}$

$m(x) = \frac{2x}{x+1}$

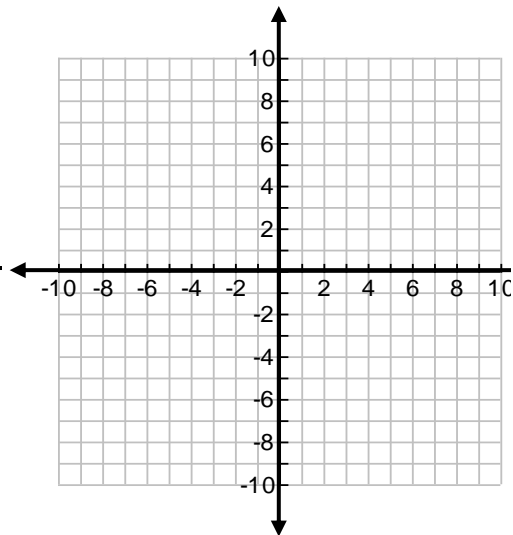
$f(x) = -2\sqrt{3x+1} + 6$



11.  $f(x) = -\sqrt{x-7} + 9$



12.  $f(x) = \frac{1}{x+3} - 4$



12.  $f(x) = 3\sqrt{x+1} - 2$

