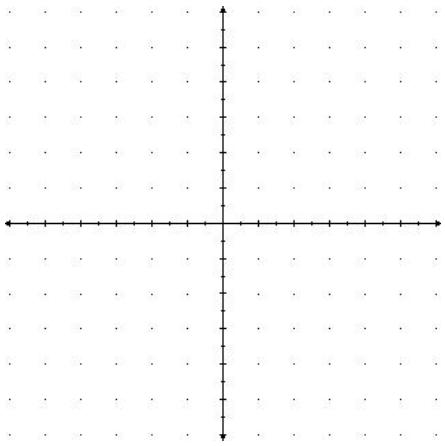
Function Notation and Graphs

1. Sketch the graph of $f(x) = \frac{3x-4}{x+2}$ at right.



a. x-intercept(s) is/are _____

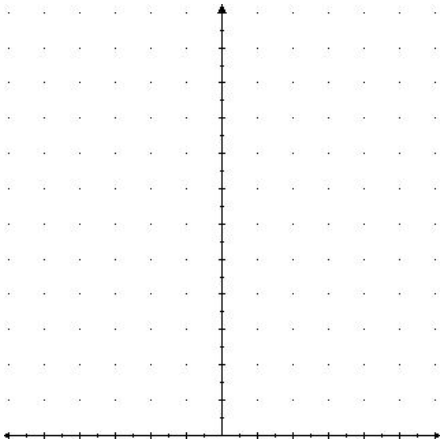
b. y-intercept is _____

c. $Dom(f) = \{$_____$\}$

d. Near -2 on the left..._____

e. Near -2 on the right..._____

f. Approaching $\pm\infty$..._____



2. Sketch the graphs of $f(x) = x^2$ and $g(x) = 2^x$.

$f(-5) =$ _____	$g(-5) =$ _____
$f(-4) =$ _____	$g(-4) =$ _____
$f(-3) =$ _____	$g(-3) =$ _____
$f(-2) =$ _____	$g(-2) =$ _____
$f(-1) =$ _____	$g(-1) =$ _____
$f(0) =$ _____	$g(0) =$ _____
$f(1) =$ _____	$g(1) =$ _____
$f(2) =$ _____	$g(2) =$ _____
$f(3) =$ _____	$g(3) =$ _____
$f(4) =$ _____	$g(4) =$ _____
$f(5) =$ _____	$g(5) =$ _____

3. Sketch the graphs of $g(x) = 2^x$ and $h(x) = \left(\frac{1}{2}\right)^x$.

$g(-5) =$ _____	$h(-5) =$ _____
$g(-4) =$ _____	$h(-4) =$ _____
$g(-3) =$ _____	$h(-3) =$ _____
$g(-2) =$ _____	$h(-2) =$ _____
$g(-1) =$ _____	$h(-1) =$ _____
$g(0) =$ _____	$h(0) =$ _____
$g(1) =$ _____	$h(1) =$ _____
$g(2) =$ _____	$h(2) =$ _____
$g(3) =$ _____	$h(3) =$ _____
$g(4) =$ _____	$h(4) =$ _____
$g(5) =$ _____	$h(5) =$ _____