

Practice

Graph each function using the tables of values provided below and a sequence of transformations:

$$y = \sqrt{x}$$

x	y
0	0
1	1
4	2
9	3

$$y = |x|$$

x	y
-2	2
-1	1
0	0
1	1
2	2

$$y = \frac{1}{x}$$

x	y
-2	-0.5
-1	-1
-0.5	-2
0	DNE
0.5	2
1	1
2	0.5

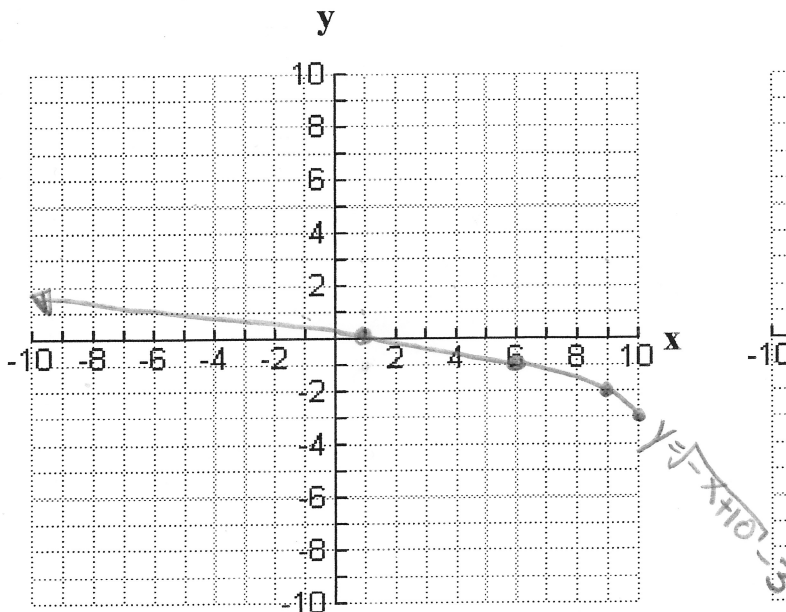
$$y = x^3$$

x	y
-2	-8
-1	-1
0	0
1	1
2	8

a) $y = \sqrt{-x+10} - 3$

$$y = \sqrt{-(x-10)} - 3$$

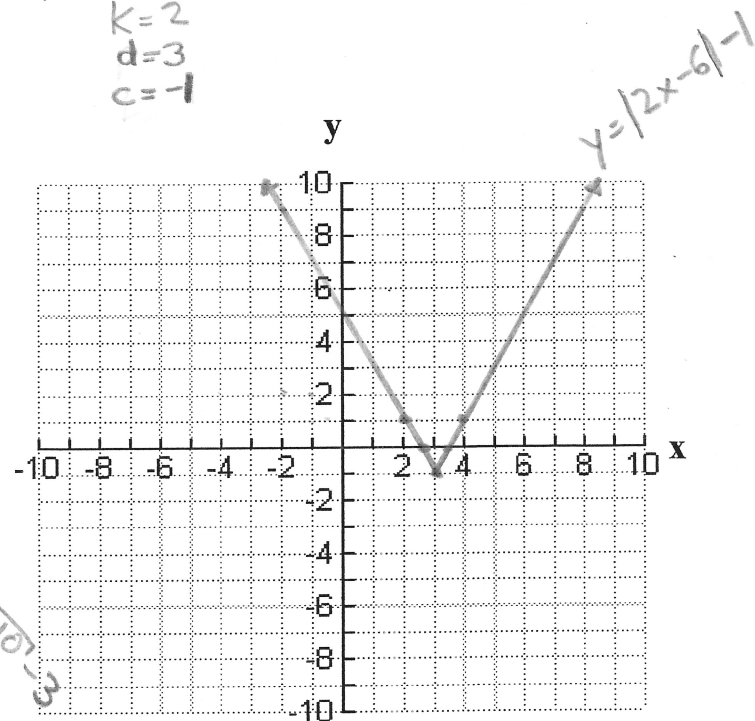
$k = -1$
 $d = 10$
 $c = -3$



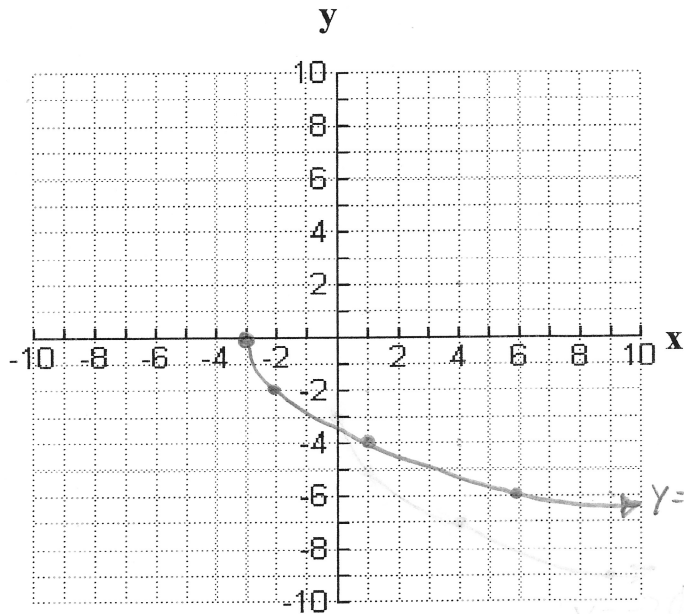
b) $y = |2x - 6| - 1$

$$y = |2(x-3)| - 1$$

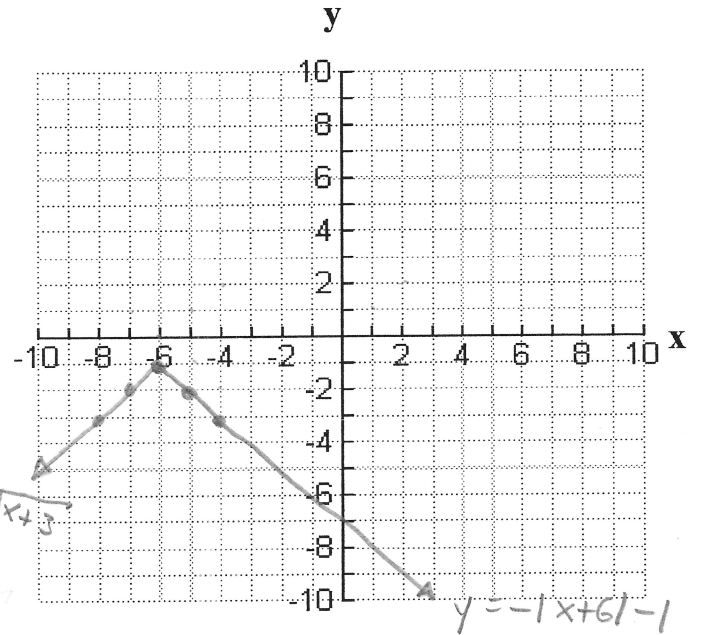
$k = 2$
 $d = 3$
 $c = -1$



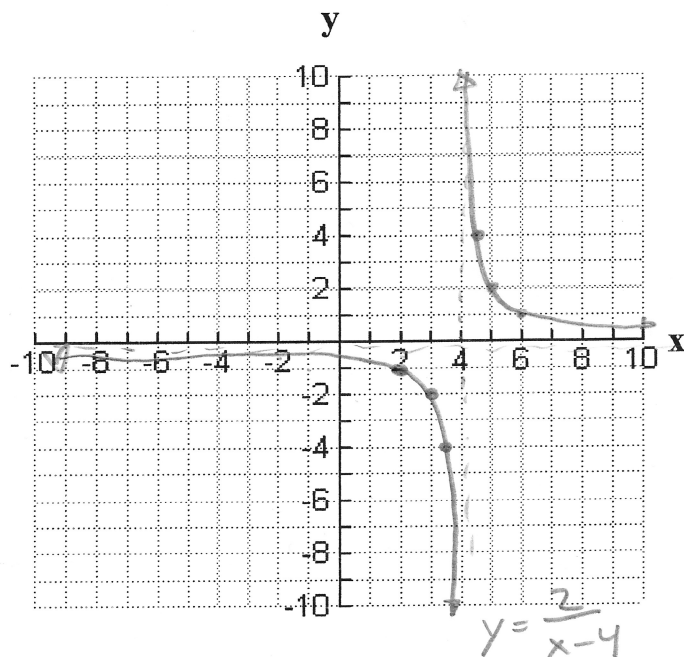
c) $y = -2\sqrt{x+3}$
 $d = -3$
 $a = -2$



d) $y = -|x+6|-1$
 $d = -6$
 $a = -1$
 $c = -1$



e) $y = \frac{2}{x-4}$
 $y = 2 f(x-4)$
 $d = 4$
 $a = 2$



f) $y = 0.5(x-3)^3 - 4$
 $d = 3$
 $a = 0.5$
 $c = -4$

