Day 6 Quiz Review

Key

For each of the following functions

a) Draw the parent function
b) Describe each transformation
c) Sketch a final graph
d) Label the domain and range of the final graph

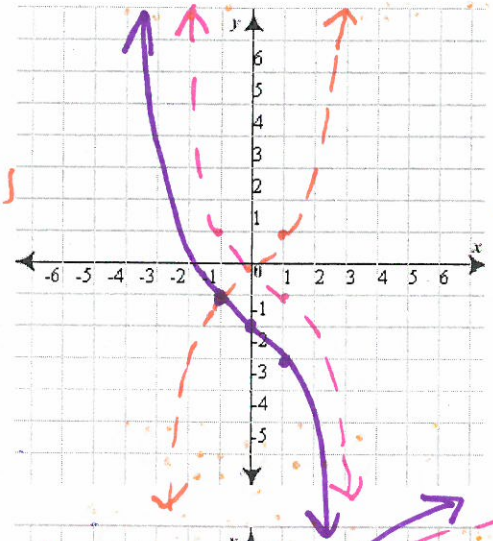
Check your answers!

1. $f(x) = -x^3 - 2$

a) $f(x) = x^3$

b) Reflect over x axis
Down 2

d) D: $(-\infty, \infty)$
R: $(-\infty, \infty)$

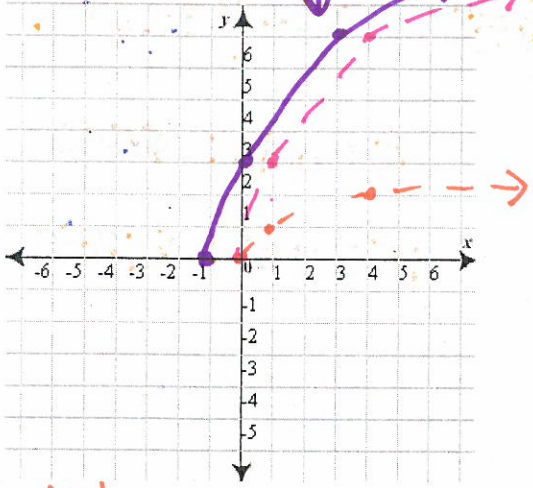


2. $f(x) = 3\sqrt{x+1}$

a) $f(x) = \sqrt{x}$

b) Vertical Stretch by 3
Left 1

d) D: $[-1, \infty)$
R: $[0, \infty)$



$\sqrt{x}$

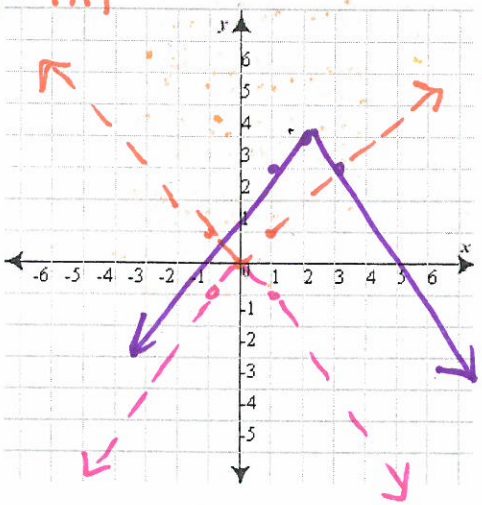
x	y
0	0
1	1
4	2

3. $f(x) = -|x-2| + 4$

a) $f(x) = |x|$

b) Reflect x-axis
Right 2
Up 4

d) D: $(-\infty, \infty)$
R: $(-\infty, 4]$



$|x|$

x	y
-1	1
0	0
1	1