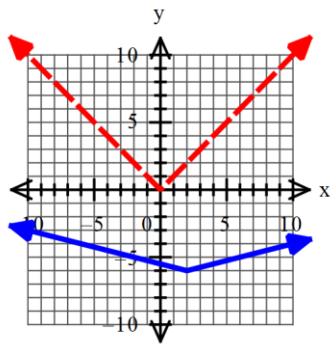


SM2—unit 1 test review 2019-2020

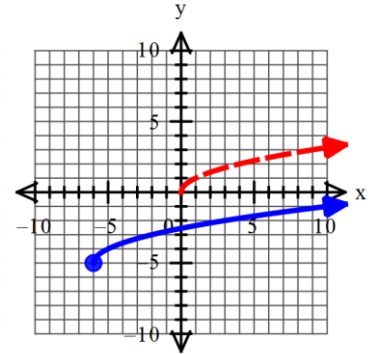
1. Domain: $[-6, \infty)$ Range: $(-\infty, 0]$
2. Domain: $(-\infty, \infty)$ Range: $(-\infty, \infty)$
3. Domain: $(-\infty, \infty)$ Range: $[-4, \infty)$
4. $f(1) = -2$
5. $f(-5) = 2$
6. $x = 1, 1\frac{1}{8}$
7. $x = 9$
8. $f(-2) = 14$
9. $g(-3) = -14$
10. $h(1) = \frac{1}{2}$
11. Parent graph: $y = |x|$ = absolute value
Vertical stretch of $\frac{1}{4}$, translate right 2, down 6
Vertex: $(2, -6)$ Domain: $(-\infty, \infty)$



x	$g(x)$
0	$-5\frac{1}{2}$
1	$-5\frac{3}{4}$
2	-6
3	$-5\frac{3}{4}$
4	$-5\frac{1}{2}$

12. Parent Graph: $y = \sqrt{x}$ = square root
Translate left 6, down 5
Endpoint: $(-6, -5)$ Domain: $[-6, \infty)$

x	y
-6	-5
-5	-4
-2	-3



13. Parent Graph: $y = x^2$ = quadratic
Reflect over x -axis, vertical stretch by 2, translate left 1, up 4
Vertex: $(-1, 4)$ Domain: $(-\infty, \infty)$

x	$f(x)$
-3	-4
-2	2
-1	4
0	2
1	-4

