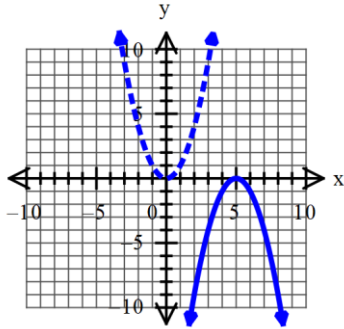


SM2 1.6 odd answers 2019-2020

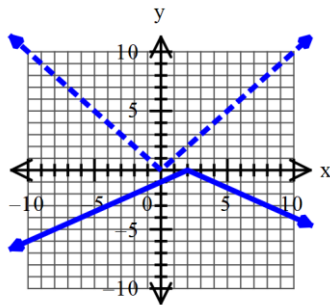
1. $a = 3, h = 6, k = 8$
3. $a = 2$ (with a reflect or negative), $h = 0, k = 7$
5. $a = 1$ (with a reflect or negative), $h = -2, k = 0$
7. Reflect over x-axis, vertical stretch of 2, translate right 1
9. reflect over x-axis, vertical stretch of 3, translate down 4
11. reflect over x-axis, translate right 1, translate down 7
13. $y = x^2$, reflect over x-axis, translate left 5, vertex: $(-5, 0)$, Domain: $(-\infty, \infty)$, Range: $(-\infty, 0]$

x	y
3	-4
4	-1
5	0
6	-1
7	-4



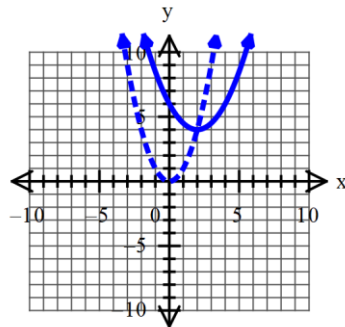
15. $y = |x|$, reflect over x-axis, vertical shrink of $\frac{1}{2}$, translate right 2, vertex: $(2, 0)$, Domain: $(-\infty, \infty)$, Range: $[0, \infty)$

x	y
0	-1
1	$-\frac{1}{2}$
2	0
3	$-\frac{1}{2}$
4	-1



17. $y = x^2$, vertical shrink of $\frac{1}{2}$, translate right 2 and up 4, vertex: $(2, 4)$, Domain: $(-\infty, \infty)$, Range: $[4, \infty)$

x	y
0	6
1	$4\frac{1}{2}$
2	4
3	$4\frac{1}{2}$
4	6



- 19A. $y = \sqrt{x} + 1$
- 19B. $y = \sqrt{x - 3}$
- 19C. $y = \sqrt{x + 4} - 2$
- 19D. $y = -\frac{1}{2}\sqrt{x}$
- 19E. $y = 3\sqrt{x} + 2$
- 21A. $y = |x| - 8$
- 21B. $y = |x - 4|$
- 21C. $y = -|x + 1|$
- 21D. $y = \frac{1}{3}|x - 2| - 3$
- 21E. $y = -4|x| + 5$