Answer Key for Family of Functions test review

1. y = -8x – 4 2) y = $-\frac{3}{2}x-5$

3) x =6 and y = 4 4) x = -3 and y =6



Domain: (-$\infty ,\infty $)

Range: $\left[3,\infty )\right.$

Function: yes

5) 5/3 6) 1/7 7) 8)

Domain: $\left[1,\infty )\right.$ Range: (-$\infty ,\infty $)

Function: no



9)

Domain: (-$\infty ,\infty $)

Range: $\left[-1,\infty )\right.$

Min @-1

X-int: 1 and 3

Y-Int: 1

Increasing : (2$,\infty $)

Decreasing: (-$\infty ,2$)

End Behavior: x$\rightarrow -\infty , f(x)\rightarrow \infty $

 x$\rightarrow \infty , f(x)\rightarrow \infty $

right 2, down 1



Domain: (-$\infty ,\infty $)

Range: $\left[-\infty ,\left.3\right]\right.$

Max @3

X-int: -4 and 2

Y-Int: 2

Increasing : (-$\infty ,-1$)

 Decreasing: (-1$,\infty $)

End Behavior: x$\rightarrow -\infty , f\left(x\right)\rightarrow -\infty $

 x$\rightarrow \infty , f\left(x\right)\rightarrow -\infty $

flipped over x-axis, left 1 and up 3

10)

11) y = $\left|x\right|$+5

12) y = $\left|x-2\right|$

13) y = $\left|x+1\right|+2$

14) ARC = 1

15) ARC = -2

16) ARC = 3

17) ARC = -1

18) ARC = 6

19) ARC = -6

20) -2/5 21) -1/2