

Name _____

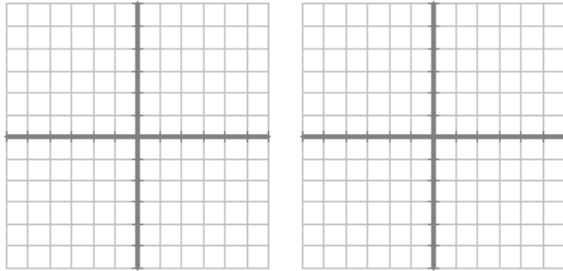
Math 095 – Teamwork # 7

You may show your work here or on another sheet of paper. Please box your final answer.

1. Find the slope of the linear function that has values $f(-5) = -6$ and $f(-20) = 4$. Only find the slope.
2. Find linear function that has the value $f(-8) = 3$ and has a slope of $-5/4$.
3. Find linear function that has a value of $g(8) = 7$ and is perpendicular to the line $y = \frac{2}{5}x - 6$.
4. Find the linear function that has function values $h(-6) = -15$ and $h(3) = -3$.

5. For each of the following parabolas, determine the following: (a) whether the parabola opens up or opens down; (b) the y-intercept; (c) the vertex; (d) the x-intercepts (if any); and (e) draw the graph.

$$f(x) = x^2 - 2x - 3 \quad g(x) = -2x^2 - 2x + 4$$



6. Let $f(x) = 10x + 4\sqrt{2x}$ and $g(x) = x + 3$
- a. Find $(f \circ g)(x)$ and $(f \circ g)(5)$

- b. Find $(g \circ f)(x)$ and $(g \circ f)(2)$

7. For the following functions, find $f^{-1}(x)$.

a. $f(x) = \frac{5x - 7}{8}$

b. $f(x) = 4x^5 + 12$

8. For both of your answers to #7, show that $(f \circ f^{-1})(x) = x$ and $(f^{-1} \circ f)(x) = x$.