



Algebra II Practice Test

Unit 3: Equations and Inequalities in Two Variables

Name _____

Date _____

1. Find the x -intercept, y -intercept, and slope for $2x + 3y = 6$; then graph the solution set.
2. Find the slope of the line through $(-2, -3)$ and $(-5, 1)$.
3. Find the equation of the line with slope -2 that contains the point $(-4, 3)$. Write your answer in slope intercept form.
4. Find the equation of the line that passes through the points $(-3, 3)$ and $(3, -1)$.
5. Graph the solution set for $y < 2x - 3$.
6. Construct a table and graph from the function $y = 7.5x$ for $0 \leq x \leq 40$.
7. State the domain and range for the function $y = 7.5x$ for $0 \leq x \leq 40$.
8. If $f(x) = 3x^2 + 2x - 1$, find $f(0)$, $f(-2)$, and $f(a + 1)$.
9. If $f(x) = 5 - x^2$ and $g(x) = 3 - 4x$, find $(f \circ g)(x)$ and $(g \circ f)(x)$.
10. y varies jointly with x and the square of z . When x is 5 and z is 3, y is 180. Find y when x is 2 and z is 4.