FSAP Name:_____
Review

1. How do you define slope? What is the slope between $A(-2, 4)$ and $B(3, -4)$.
2. Give the equation of the line with slope 2 and y-intercept -3.
3. Give the equation of the line with slope -1 that passes through the point $(-2, 5)$.
4. What is nice about the coordinates of the points on lines through the origin in relation to the lines' slope? Explain.
5. If you have a line with slope $\frac{1}{3}$ that passes through $A(2, 3)$ what is the the y coordinate of the point on this line with x coordinate 2.5?
6. Find the equation of the line that passes through $A(1, 2)$ and $B(-3, 4)$. Find two other points on this line, one point with integer coordinates, one point with at least one coordinate not an integer.
7. Simplify $\sqrt{288}$
8. If the legs of an isosceles right triangle both have length 10, what is the length of its hypotenuse? What if the legs are both 7 units long? What about 5 units long? What is the pattern, if you let the leg lengths by n?
9. Simplify $\frac{3-4}{2} - 4\left(\frac{1-4}{3}\right)$
10. Both $A(3, 4)$ and $B(5, 0)$ are five units away from the origin. List 7 other points that are also five units away from the origin. Write an equation that states the distance between the point (x, y) and the point $(0, 0)$ is five. What does shape does this equation describe?