FSAP 10 Name:_____
Recap of Lines

1. $y = mx + b$ is called slope-intercept form. What y value do you get if you let $x = 0$. What does this confirm about b?
2. Remember you only need two points to graph a line. Graph $3x - 2y = 6$ by first finding the x-intercept and the y-intercept. Explain why this might be considered easier than finding the slope and y-intercept.
3. If you know a line has slope 3 and passes through the point $A(2, -5)$ why might some people be tempted to give the equation of the line as $y = 3x - 5$? What is the actual equation of the line in slope-intercept form.
4. A line has slope -2 and passes through $A(3, -4)$. What is the equation of this line in standard form?
5. Are $A(2, 2)$, $B(12, 7)$ and $C(-3, -0.5)$ collinear (ie. on the same line)? How do you know?
6. If you start 15 miles away from home and walk towards home at a rate of 2 miles per hour what is the equation that relates time (in hours) to how far ways you are from home(in miles)? What do the intercepts represent in the problem?
7. In the previous question you have generated a linear model of your walk home one day. Are there any points on the line that don't make sense in the context of this model?