Algebra P3
Homework #11

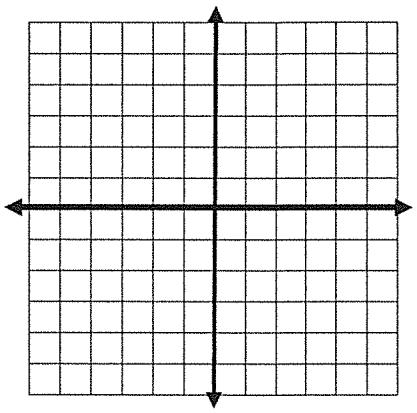
Name:

Turn them into $y = mx + b$!
+ Word Problems!

Turn all of the following equations into $y = mx + b$. Then graph the ones that have graphs.

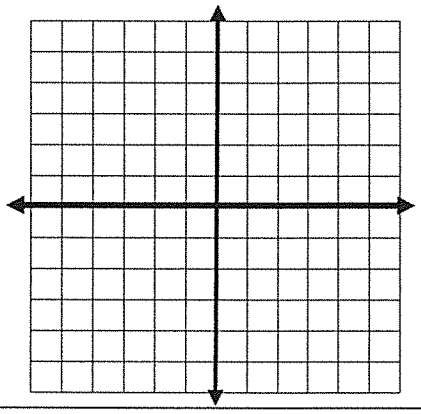
1. $3x + 4y = -4$

2. $3x + 4y = 12$



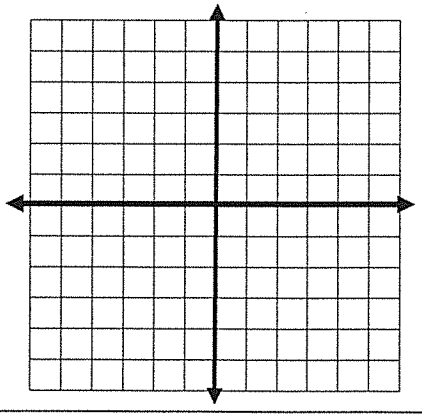
3. $4x - 3y = 6$

4. $5x - 2y = -6$



5. $8y + 5 = x$

6. $-x = 12 - 3y$



7. Joe is speeding away in his car to try to get away from his clingy girlfriend. He starts at 20 feet from the robber, and he is increasing the distance by 2 feet every second. a) Pick out a slope and y-intercept from the description of this problem. b) Find the equation for Joe's distance over time. c) How far away will Joe be in 20 seconds? <u>You must use your equation</u>! d) When will Joe be 74 feet away? Again, <u>you must use your equation</u>! By the way, his girlfriend was quicker than Joe, and they were later married.	8. Lisa is sinking into quicksand!! After 3 minutes, 36 inches of her are outside of the sand. After 9 minutes, only 24 inches are sticking out of the sand. a) Find two points from this situation. b) Find the equation of the line for Lisa's sticky situation. c) How much of Lisa will be sticking out of the sand in 13 minutes? You <u>must use your equation</u>! d) When will Lisa go under? By the way, Mr. Simon discovered Lisa and pulled her out with a tow rope. Lucky for Mrs. Simon!	9. At Perky Perks, you can get coffee with extra shots of espresso. A regular coffee costs $3.00, and each additional shot of espresso costs $0.80. a) Pick out a slope and y-intercept from the description of this problem. b) Find the equation for the cost of Lana's coffee with extra shots. c) How much will a coffee with 20 extra shots of espresso cost? You <u>must use your equation</u>! d) How many extra espresso shots did Lana have if she paid $32.60? Again, <u>you must use your equation</u>! By the way, Lana was so juiced she got into an accident on the drive home and totaled her car.