

Name _____

Homework 1
Section 1.4

Give your answer to each of the following in slope-intercept form.

1. (3) Determine the equation of the line which passes through $(-8, 9)$ and has slope $m = -\frac{3}{4}$.

2. (3) Determine the equation of the line which passes through the points $(-5, -1)$ and $(7, 3)$.

3. (3) Determine the equation of the line which is parallel to $2x + 3y = 7$ and passes through the point $(8, 5)$

4. (4,3,1,3) A company decides to start a new ride share business with a simple linear cost model. The price of any ride includes an initial pick-up fee plus a charge for each mile driven. Bob takes a 4 mile trip which costs him \$15 and Alice takes an 11 mile ride which costs a total of \$29.
- (a) Write an equation of a line which gives the cost of a ride in terms of how many miles the trip covered. (Remember to define any variables used.)
- (b) What does the slope of the line mean? (Include the number itself along with the “real-world” interpretation.)
- (c) What is the initial pick-up fee?
- (d) Charlie, a driver for the new service, has completed 9 trips which have totaled \$187 worth of fares. How many miles has Charlie driven for the service?