Math 110
More Notes on Linear Equations

1. Sketch lines with the indicated slopes.
(a) $m$ is positive and large.
(b) $m$ is positive and close to zero.
(c) $m$ is negative and close to zero.
(d) $m<-2$

2. Graph two different lines with slope $\frac{3}{4}$.

3. Write the equation of a line parallel to $y=\frac{2}{3} x-4$.
4. Make a table for the equation $y=\frac{7}{2} x+3$.

| $x$ |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $y$ |  |  |  |  |  |

5 . Find the equation for the table below.

| $x$ | -6 | -3 | 0 | 3 | 6 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $y$ | 12 | 7 | 2 | -3 | -8 |

6. Graph the equation $y=\frac{2}{3} x-4$

7. Write the equation of the line below.

8. A taxi charges $20 \phi$ per mile and a $\$ 3$ pick-up fee. Write an equation for the charge, $C$, of a taxi ride that lasts a distance of $d$ miles.
9. Rent-a-Dump car rental company rents cars for $\$ 25$ per day. They also have a mandatory one time insurance charge of $\$ 34$.
(a) Write an equation for the cost, $C$, of renting a car from Rent-a-Dump when it is driven for $d$ miles.
(b) Use your equation to predict the cost of renting the car for a week.
