# Unit III - First Degree Relations with Two Placeholders Part C - Finding Relations For Given Solution Sets Lesson 1 - Given the Slope and $y$-Intercept 

Find a relation in the form $y=\mathrm{m} x+\mathrm{b}$ which has a solution set line with the slope and $y$-intercept as given in each of the following. Then rewrite the relation, if necessary, to use only integer coefficients.

1. $\quad$ Slope is $\frac{3}{4}, \quad y$-intercept is -2
2. Slope is $1, \quad y$-intercept is 3
3. $\mathrm{m}=\frac{5}{3}, \quad \mathrm{y}$-intercept is 0
4. $\mathrm{m}=\frac{-3}{8}, \quad \mathrm{~b}=1$
5. Slope is $0, \quad y$-intercept is 0
6. $\mathrm{m}=\frac{1}{7}, \quad \mathrm{~b}=-3$
7. Slope is $\frac{-2}{5}, y$-intercept is -3
8. $\quad$ Slope is $\frac{5}{4}, \quad y$-intercept is $\frac{2}{3}$
9. $\mathrm{m}=-1, \quad \mathrm{~b}=-1$
10. $\mathrm{m}=-3, \quad \mathrm{~b}=\frac{4}{3}$

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1. $4 y=3 x-8$
2. $y=x+3$
3. $3 y=5 x$
4. $8 y=-3 x$
5. $y=0$
6. $7 y=x-21$
7. $5 y=-2 x-15$
8. $12 y=25 x+8$
9. $y={ }^{-} x-1$
10. $y=-9 x+4$
