EXTRA PRACTICE — Exercises

Unit III – First Degree Relations with Two Placeholders
Part C – Finding Relations For Given Solution Sets
Lesson 2 – Given the Slope and One Solution

Find a relation for each of the following in the form $y = mx + b$ which has a solution set line determined by the given slope and given solution. Then rewrite the relation, if necessary, to use only integer coefficients.

1. Slope is 2, one solution is $(4, -1)$

2. Slope is $\frac{2}{3}$, one solution is $(3, -2)$

3. Slope is 1, one solution is $(-4, -2)$

4. Slope is $\frac{8}{5}$, one solution is $(3, -2)$

5. Slope is 3, one solution is $(1, -3)$

6. Slope is 0, one solution is $(0, -5)$

7. Slope is $\frac{-2}{3}$, one solution is $(3, 0)$

8. Slope is $\frac{-4}{5}$, one solution is $(2, -3)$

9. Slope is 0, one solution is $(-5, 0)$

10. Slope is $\frac{-2}{3}$, one solution is $(0, 3)$

EXTRA PRACTICE — Answer Key

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Find a relation for each of the following in the form $y = mx + b$ which has a solution set line determined by the given slope and given solution. Then rewrite the relation, if necessary, to use only integer coefficients.

1. $y = 2x - 9$

2. $y = \frac{2}{3}x + {}^{-}4$ or $3y = 2x - 12$

3. $y = x + 2$

4. $5y = 8x - 34$

5. $y = 3x - 6$

6. $y = {}^{-}5$

7. $3y = {}^{-}2x + 6$

8. $5y = {}^{-}4x - 7$

9. $y = 0$

10. $3y = {}^{-}2x + 9$