### Lesson 11 Practice Problems

1. Diego has $11 and begins saving $5 each week toward buying a new phone. At the same time that Diego begins saving, Lin has $60 and begins spending $2 per week on supplies for her art class. Is there a week when they have the same amount of money? How much do they have at that time?
2. Use a graph to find $x$ and $y$ values that make both $y=\frac{-2}{3}x+3$ and $y=2x−5$ true.
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1. The point where the graphs of two equations intersect has $y$-coordinate 2. One equation is $y=-3x+5$. Find the other equation if its graph has a slope of 1.
2. A farm has chickens and cows. All the cows have 4 legs and all the chickens have 2 legs. All together, there are 82 cow and chicken legs on the farm. Complete the table to show some possible combinations of chickens and cows to get 82 total legs.

| * number of chickens ($x$)
 | * number of cows ($y$)
 |
| --- | --- |
| * 35
 |  |
| * 7
 |  |
|  | * 10
 |
| * 19
 |  |
|  | * 5
 |

* Here is a graph that shows possible combinations of chickens and cows that add up to 30 animals:
* 
* If the farm has 30 chickens and cows, and there are 82 chicken and cow legs all together, then how many chickens and how many cows could the farm have?
* (From Unit 4, Lesson 10.)



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