Name

3-2B Lesson Master

USES Objective D

In 1–9, a situation is given. Define the variable and represent the relationship with an equation.

1. Alicia works 15 hours a week. She has already worked 30 hours this month. How many more weeks must she work to have a total of 120 hours?

2. When Steve travels on business, he is allowed $35 a day for meals and $0.75 per mile car allowance. His salary for one day is $150. How far did he travel if he was paid $335 for a day's work?

3. One type of bamboo plant can grow 20 feet in one month. The plant was 5 feet tall when planted. At this rate, how long will it take the plant to reach a height of 70 feet?

4. Joel washes 3 loads of laundry a week. He has washed 9 loads since buying a jug of liquid detergent that that will wash 39 loads. How many more weeks of laundry can he do before he needs to buy more detergent?

5. Nishan purchased a gumball machine that holds 100 gumballs. Each day, she removes 3 gumballs. After how many days will the machine have 49 gumballs left?

6. Vijay saved $150 to buy DVDs. After he paid $22 each for some DVDs, he had $40 left. How many DVDs did he buy?

7. Joeal bought 8 breakfast muffins for her friends with a $20 bill. The sales clerk handed her $9.68 in change. What was the cost of each muffin?

8. Anastasia is saving for a laptop computer. She already has $450 saved and plans to save $25 a week from her baby-sitting money. If the laptop she wants costs $1,150, how many weeks will it take her to save enough to buy it?

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9. Jake cleaned all the carpets in his apartment. Rental of a rug shampooer was $34.99 a day, rug shampoo was $16.99, and tax was $10.37. His total bill was $132.33. How many days did he rent the rug shampooer?

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REPRESENTATIONS Objective E

In 10 and 11, solve the equation by making a table.
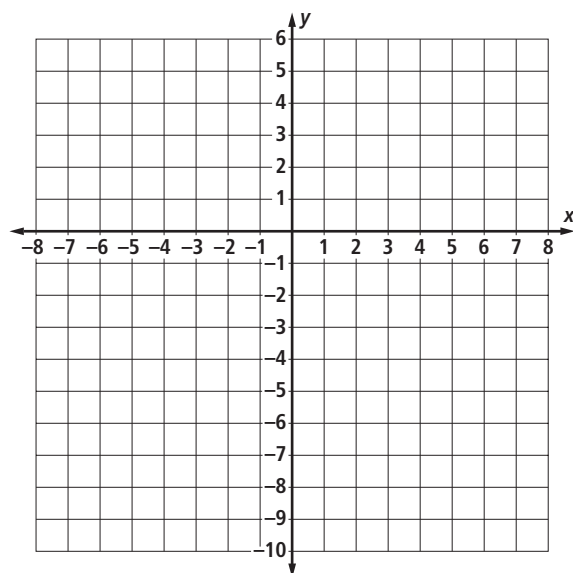
10. $-2 = 5x - 7$

x	5x − 7	y
−2		
−1		
0		
1		
2		

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11. $-7x + 15 = 1$

x	−7x + 15	y
0		
1		
2		
3		
4		

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In 12 and 13, solve the equation by making a graph and drawing lines from the y-axis to the graph, and then to the x-axis to indicate the solution.

12. $3x + 7 = -8$

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13. $-10 = -4x + 2$

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