Name_____ Date _____

1.3 Practice A

In Exercises 1–8, solve the equation. Check your solution.

1. $4x - 7 = -3x$

2. $8b + 2 = 3b + 12$

3. $7k + 24 = -16 - 3k$

4. $-5t + 7 = 11t - 25$

5. $6n + 1 = 2n - 7$

6. $8h + 5 - 3h = 8h - 4$

7. $g - 10 + 7g = 15 + 3g$

8. $-3(w + 4) = 4w - 5$

9. In the equation $35t + 70(7 - t) = 385$, the variable t represents the number of hours you drove at 35 miles per hour on a 385-mile trip. How many hours did you drive at 35 miles per hour?

In Exercises 10–13, solve the equation, if possible. Determine whether the equation has *one solution, no solution,* or *infinitely many solutions.*

10. $7y + 13 = 5y - 3$

11. $8 + 9p = 9p - 7$

12. $3(7r - 2) = 21r - 6$

13. $2(3x + 6) = 3(2x - 6)$

14. Describe and correct the error in solving the equation.

$$\begin{aligned} 2(s - 5) &= 2(s + 5) \\ 2s - 10 &= 2s - 10 \\ 2s &= 2s \\ 0 &= 0 \end{aligned}$$

The equation has infinitely many solutions.

15. One serving of oatmeal provides 16% of the dietary fiber you need daily. You must get the remaining 21 grams of dietary fiber from other sources.

a. How many grams of dietary fiber do you need daily?

b. Fifty percent of the dietary fiber in one serving of oatmeal is soluble fiber. How many grams of soluble fiber are in one serving of oatmeal?

In Exercises 16 and 17, find the value of *r*.

16. $5(x - 4) + 4 + r = 4(x + 3) + x$

17. $3(2x - 2) - r + 3x = 2(7x + 1) - 5x - 9$

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1.3 Practice B

In Exercises 1–8, solve the equation. Check your solution.

1. $5t + 7 = 3t - 9$

2. $-8u + 3 = 2u - 17$

3. $6w + 3 - 10w = 7w - 8$

4. $-a + 4a - 9 = 8a + 6$

5. $9(k - 2) = 3(k + 4)$

6. $-2(x - 4) = 7(x - 4)$

7. $\frac{2}{3}(3 - 6x) = -3(8x - 4)$

8. $8(3g + 2) - 3g = 3(5g - 4) - 2$

In Exercises 9–12, solve the equation, if possible. Determine whether the equation has *one solution, no solution,* or *infinitely many solutions.*

9. $5(2f + 3) = 2(5f - 1)$

10. $\frac{1}{3}(12 - 24v) = -2(4v - 2)$

11. $3(k + 1) + 11k = 2(4 + 5k) + 3$

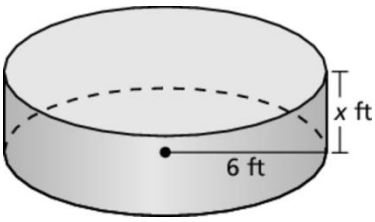
12. $-4(-m + 2) + 2m = -\frac{1}{2}(10 - 12m) - 3$

13. Using the information in the table, write and solve an equation to find the number of toppings when you would pay the same amount for Pizza A and Pizza B.

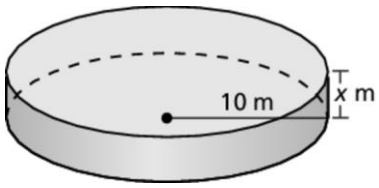
	Cheese pizza	Price per topping
Pizza A	\$10	\$1.50
Pizza B	\$12.50	\$1.00

In Exercises 14 and 15, the value of the surface area of the cylinder is equal to the value of the volume of the cylinder. Find the value of *x*. Then find the surface area and volume of the cylinder.

14.



15.



16. Four times the greater of two consecutive integers is 18 more than three times the lesser integer. What are the integers?