Lesson 2-1: Combine Like Terms to Solve Equations

1. Sample answer: To solve an equation, I need to have one variable term by itself on one side of the equation. So when there is more than one term with the variable, I have to combine them. Then I use inverse operations to solve for the variable.

2. Sample answer: Two or more terms will have the same variables raised to the same powers.

3. Sample answer: The like terms are 0.75s and $\frac{5}{8}$s. You would need to write $\frac{5}{8}$s as 0.625s and subtract that from 0.75s. You could also write 0.75s as $\frac{3}{4}$s and subtract $\frac{5}{8}$s.

4. 30 cakes

5. 500,000 people

6. z = 7

7. 11
   $\frac{20}{11}$; 11; $\frac{20}{11}$
   20

8. - 0.2
   - 0.2
   - 27

9. x = 135

10. x = - 23

11. x = 3

12. x = 70

13. $30 per square foot

14. 32 pounds

15. 780 feet below sea level

16. Sample answer:
    - 1.2y - 4.2y = - 3.78;
    y = 0.7

17. h = 239$\frac{5}{16}$

18. 4 classes

<----------$27.08---------->

0.95x	5.82x

19. C

20. a.

<----------132 inches---------->

L	3L

b. Sample answer:
L + 3L = 132
4L = 132
L = 33 inches