

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

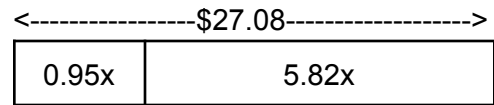
14. 32 pounds

15. 780 feet below sea level

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

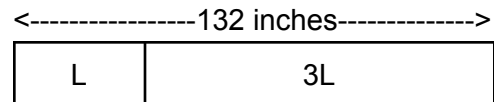
17. $h = 239\frac{5}{16}$

18. 4 classes



19. C

20. a.



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