Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

UNIT 7 LESSON 3

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| AIM: | SWBAT solve one-step addition and subtraction equations |

**THINK ABOUT IT!**

The bar model below represents the equation b + 9 = 15. Use the model to determine the value of b to make the equation true.



Explain how you used the model to find the value of b.

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**Test the Conjecture**

*Test the Conjecture #1)* What is the solution of the equation below? d – 5 = 7

*Test the Conjecture #2)* What value of p makes the equation below true? 15.5 – p = 4.8

Conjecture

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**PARTNER PRACTICE**

* CFS for top quality work
	+ Problem is annotated with margin notes to provide additional meaning
	+ Bar model is drawn accurately and labeled
	+ All calculations are shown, neatly organized, and labeled
	+ Answer statement is provided
	+ Check is completed

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| *Bachelor Level* |

**Directions:** Draw a model to solve each equation and check your answer using substitution.

1. 12 = 8 + c

1. f – 10 = 15
2. 100 – h = 27

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| *Master Level* |

1. Nadia bought n tickets for this summer’s Beyoncé concert. She gave 17 tickets away to her friends and had 19 left to sell. The equation n – 17 = 19 can be used to find n, the total number of tickets Nadia bought for the concert. Which equation below can be used to find the value of n?
	1. n = 19 – 17
	2. n = 19 + 17
	3. n = 17 – 19
	4. 17 = 19 – n

Explain how you determined your answer

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**INDEPENDENT PRACTICE**

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| *Bachelor Level* |

**Directions:** Draw a model to solve each equation and check your answer using substitution.

1. y + 15 = 41
2. h – 25 = 93
3. 34 – v = 19

Explain how you used a model to solve number 3

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| *Master Level* |

**Directions:** Draw a model to solve each equation and check your answer using substitution.

1. 15¼ = e + 12½
2. b – 12.95 = 18.93
3. $3\frac{7}{10}= 14\frac{2}{5}-k$
4. Which equation or equations have a solution of x = 4.05? Select all that apply.
	1. x + 3.4 = 4.39
	2. x + 9.34 = 13.39
	3. 12.1 – x = 8.05
	4. x – 2.04 = 6.09
5. Paul bought a bag of dog food that cost $4.59 and a bag of cat food that cost *d* dollars. He spent a total of $8.42. The equation 4.59 + d = 8.42 can be used to find the cost of the cat food, in dollars. What is the cost of the cat food?

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| *PhD Level* |

1. Michael bought 8 Granny Smith apples, 7 Macintosh apples, and *p* Red Delicious apples. She bought a total of 27 apples. Write and solve an equation that represents this problem.

* CFS for top quality work
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	+ Bar model is drawn accurately and labeled
	+ All calculations are shown, neatly organized, and labeled
	+ Answer statement is provided
	+ Check is completed

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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**EXIT TICKET**

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| Self-assessment | I mastered the learning objective today. | I am almost there.  | Need more practice and feedback. |
| Teacher feedback | You mastered the learning objective today. | You are almost there.  | You need more practice and feedback. |

1. Find the value of x that makes the following equation true. Use a model to show your thinking.

x + 12 = 25

2. Jeremiah solved the equation 16 – k = 4 and said that the value of k = 20 because 16 + 4 = 20. Do you agree or disagree with his claim? Explain and include a model in your work.

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