

Math 7 Period _____
7.6.3 Homework Set

Name _____
Date _____

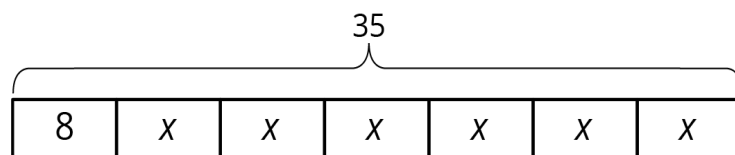
1. Use a T check to determine whether the given value is a solution to the equation.

a. $4n - 3 = 9 - 2n$, $n = 2$

b. $9m - 19 = 1 + 3m$, $m = \frac{10}{3}$

c. $3(y + 8) = 2y - 6$, $y = 30$

2. Select **all** the equations that match the tape diagram.



a. $35 = 8 + x + x + x + x + x + x$

d. $6x + 8 = 35$

b. $35 = 8 + 6x$

e. $6x + 8x = 35x$

c. $6 + 8x = 35$

3. Torrin is trying to create a number puzzle for his younger sister to solve. He challenges his sister to find the mystery number. “When 4 is subtracted from half of a number the result is 5.” The equation to represent the mystery number is $\frac{1}{2}m - 4 = 5$. Torrin’s sister tries to guess the mystery number. Use T checks to answer the following questions.
- a. Her first guess is 30. Is she correct?

 - b. Her second guess is 2. Is she correct?

 - c. Her final guess is 9. Is she correct?

Challenge: What is the mystery number if none of Torrin’s sister’s guesses were correct? If one is correct, show the work his sister may have done to get that value.