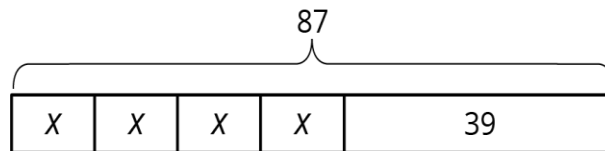


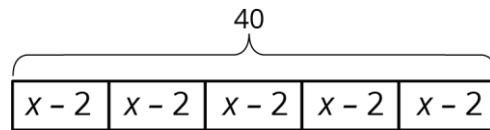
1. Mya says that $10x + 6$ and $5x + 11$ are equivalent because they both equal 16 when x is 1. Do you agree with Mya? Explain your reasoning.

2. Select **all** stories that the tape diagram can represent.



- a. There are 87 children and 39 adults at a show. The seating in the theater is split into 4 equal sections.
- b. There are 87 first graders in after-care. After 39 students are picked up, the teacher put the remaining students into 4 groups for an activity.
- c. Liam buys a pack of 87 pencils. He gives 39 to his teacher and shared the remaining pencils between himself and 3 friends.
- d. Hailey buys 4 packs of paper clips with 39 paper clips in each. Then he gives 87 paper clips to his teacher.
- e. Natalie's family spends \$87 on a \$39 dinner and 4 tickets to the fair.

3. Sarah wants to save \$40 to buy a gift for her dad. Sarah's neighbor will pay her weekly to mow the lawn, but Sarah always gives a \$2 donation to the food bank in weeks when she earns money. Sarah calculates that it will take her 5 weeks to earn the money for her dad's gift. She draws a tape diagram to represent the situation.



- A. Explain how the parts of the tape diagram represent the story.
- B. How much does Sarah's neighbor pay her each week to mow the lawn?

4. Select **all** expressions that are equivalent to $5x - 15 - 20x + 10$.
- a. $5x - (15 + 20x) + 10$
 - b. $5x + -15 + -20x + 10$
 - c. $5(x - 3 - 4x + 2)$
 - d. $-5(-x + 3 + 4x + -2)$
 - e. $-15x - 5$
 - f. $-5(3x + 1)$