G3-M1-Lesson 15
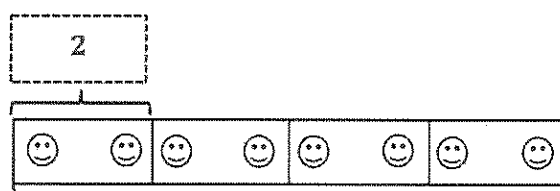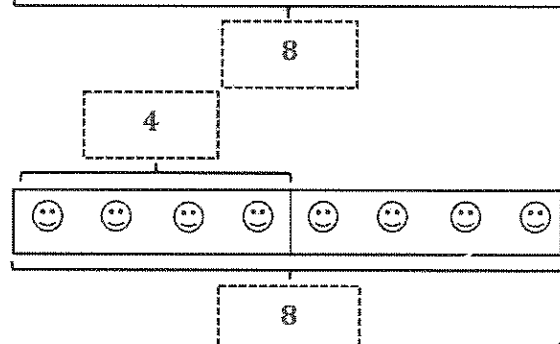
1. Label the tape diagrams, and complete the equations. Then, draw an array to represent the problems.

$$4 \times 2 = \underline{\quad 8 \quad}$$

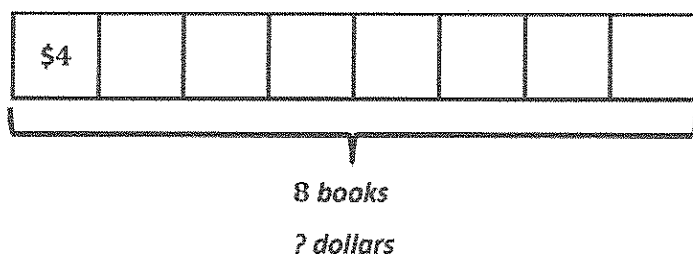> The tape diagram shows 4 units of 2. I can draw an array with 4 rows of 2.

$$2 \times 4 = \underline{\quad 8 \quad}$$

> The tape diagram shows 2 units of 4. I can draw an array with 2 rows of 4.

> One tape diagram shows 2 units of 4, and the other shows 4 units of 2. The pictures look different, but they both show a total of 8.

2. 8 books cost $4 each. Draw and label a tape diagram to show the total cost of the books.

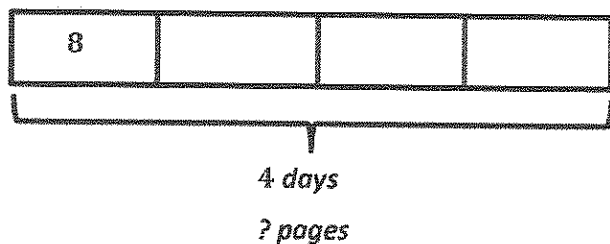| $4							

8 books

? dollars

> I can draw a tape diagram with 8 units to represent the 8 books. Each book costs $4, so each unit represents 4. I need to find the total cost.

$$8 \times 4 = 32$$

> 8 fours or 8 × 4 is equal to 32.

The books cost 32 dollars.

3. Liana reads 8 pages from her book each day. How many pages does Liana read in 4 days?

8			

4 days

? pages

I can draw a tape diagram with 4 units to represent the 4 days. Liana reads 8 pages each day, so each unit represents 8. I need to find the total number of pages.

$4 \times 8 = 32$

Liana reads 32 pages.

I just solved 8×4, and I know that $8 \times 4 = 4 \times 8$. If 8 fours is equal to 32, then 4 eights is also equal to 32.

Lesson 15:   Relate arrays to tape diagrams to model the commutative property of multiplication.

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