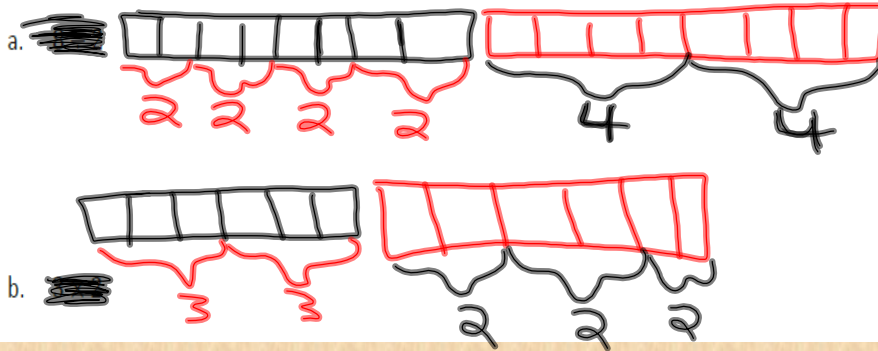


Lesson 2: The Relationship of Multiplication and Division

Classwork

Opening Exercise

Draw a pictorial representation of the division and multiplication problems using a tape diagram.



Jan 30-7:14 AM

Exploratory Challenge

Work in pairs or small groups to determine number sentences to show the relationship between multiplication and division. Use tape diagrams to provide support for your findings.

1. Create two number sentences to show the relationship between multiplication and division. These number sentences should be identities and include variables. Use the squares to develop these number sentences.
2. Write your number sentences on large paper. Show a series of tape diagrams to defend each of your number sentences.

Use the following rubric to critique other posters.

1. Name of group you are critiquing.
2. Number sentence you are critiquing.
3. Whether or not you believe their number sentences are true and reasons why.

Jan 30-7:16 AM

Problem Set

1. Fill in each blank.

a. $132 \div 3 \times 3 = 132$

b. $225 \div 25 \times 25 = 225$

c. $56 \times 8 \div 8 = 56$

d. $452 \times 12 \div 12 = 452$

2. How are the relationships of addition and subtraction similar to the relationship of multiplication and division?

They both have identities.

Jan 30-7:17 AM

Lesson 2: The Relationship of Multiplication and Division

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Opening Exercise

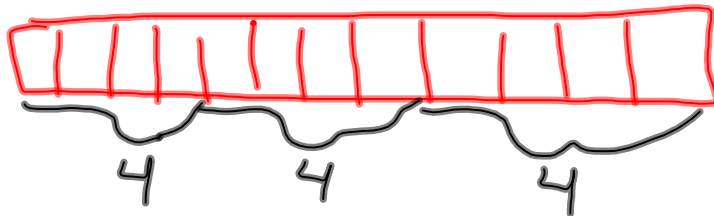
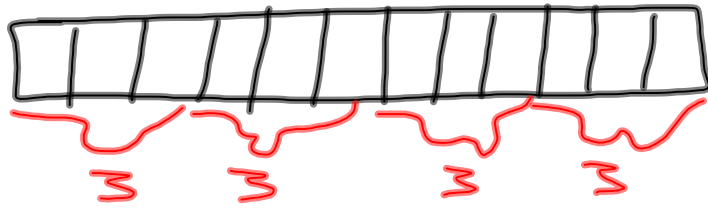
Draw a pictorial representation of the division and multiplication problems using a tape diagram.

a. $8 \div 2$

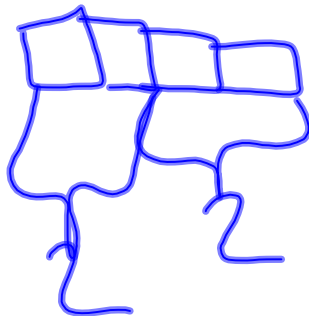
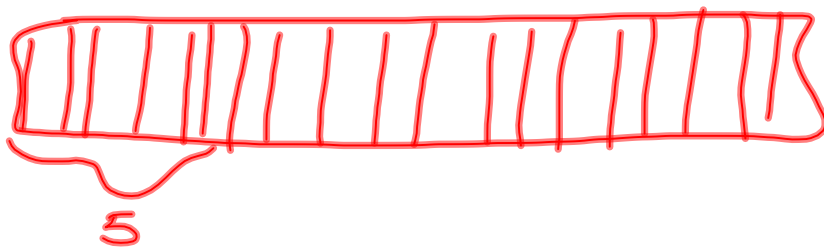
b. 3×2

Jan 30-7:15 AM

$$12 \div 3 \times 3 = 12$$



Feb 4-2:08 PM



Feb 4-2:10 PM

$12 \div 3 \times 3 = 12$

The first diagram shows a horizontal bar divided into 12 equal segments. Red brackets underneath group the segments into four groups of three. Below each bracket is the number '3'.

The second diagram shows a horizontal bar divided into 12 equal segments. Red brackets underneath group the segments into three groups of four. Below each bracket is the number '4'.

The third diagram shows a horizontal bar divided into 20 equal segments. Red brackets underneath group the segments into four groups of five. Below each bracket is the number '5'.

Feb 4-2:49 PM