## Multiply.

9 x 1 = 9 9 x 2 = 
$$18$$
 9 x 3 =  $27$  9 x 4 =  $36$ 

9 x 5 =  $45$  9 x 6 =  $54$  9 x 7 =  $63$  9 x 8 =  $72$ 

9 x 9 =  $81$  9 x 10 =  $90$  9 x 5 =  $45$  9 x 6 =  $54$ 

9 x 5 =  $45$  9 x 7 =  $63$  9 x 5 =  $45$  9 x 8 =  $72$ 

9 x 5 =  $45$  9 x 9 =  $81$  9 x 5 =  $45$  9 x 8 =  $72$ 

9 x 6 =  $54$  9 x 7 =  $63$  9 x 6 =  $54$  9 x 7 =  $63$ 

9 x 6 =  $54$  9 x 8 =  $72$  9 x 6 =  $54$  9 x 9 =  $81$ 

9 x 6 =  $54$  9 x 7 =  $63$  9 x 6 =  $54$  9 x 7 =  $63$ 

9 x 8 =  $12$  9 x 7 =  $63$  9 x 8 =  $12$  9 x 7 =  $63$ 

9 x 8 =  $12$  9 x 6 =  $54$  9 x 8 =  $12$  9 x 7 =  $63$ 

9 x 8 =  $12$  9 x 9 =  $81$  9 x 9 =  $81$  9 x 7 =  $63$ 

9 x 9 =  $81$  9 x 6 =  $54$  9 x 9 =  $81$  9 x 8 =  $81$  9 x 9 =  $81$  9 x 8 =  $81$  9 x 9 =  $81$  9 x 8 =  $81$  9 x 9 =  $81$  9 x 8 =  $81$  9 x 9 =  $81$  9 x 8 =  $81$  9 x 9 9 x 9 x 9 x 9 x 9 x 9 x 9 x

## @ Bill Davidson



Lesson 15:

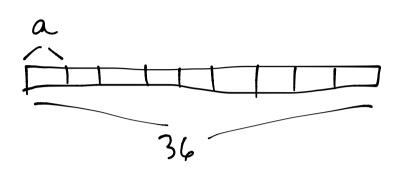
Date:

Interpret the unknown in multiplication and division to model and solve problems. 7/31/13



Date

1. The store clerk equally divides 36 apples between 9 baskets. Draw a tape diagram and label the number of apples in each basket as a. Write an equation and solve for a.

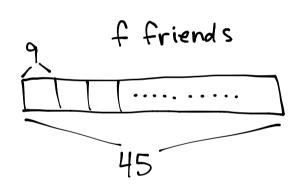


$$36 \div 9 = a$$

$$\alpha = 4$$

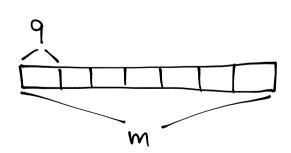
There are 4 apples in each basket

2. Elijah gives each of his friends a pack of 9 almonds. He gives away a total of 45 almonds. How many packs of almonds did he give away? Model using a letter to represent the unknown, then solve.



Elijah gave away packs of almonds to 5 friends.

3. Denice buys 7 movies. Each movie costs \$9. What is the total cost of 7 movies? Use a letter to represent the unknown. Solve.

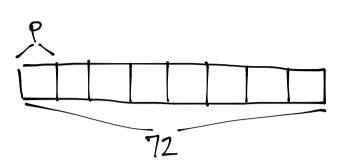


$$7 \times 9 = m$$

$$m = $63$$

Denice spent \$63 on the movies.

4. Mr. Doyle shares 1 roll of bulletin board paper equally with 8 teachers. The total length of the roll is 72 meters. How much bulletin board paper does each teacher get?



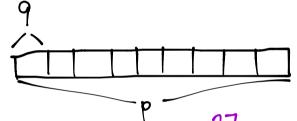
$$72 \div 8 = P$$
$$P = 9$$

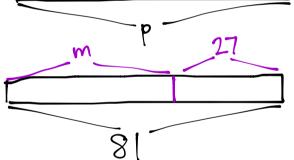
Fach teacher gets 9 meters of bulletin board paper.

5. There are 9 pens in a pack. Ms. Ochoa buys 9 packs. After giving her students some pens, she has 27 pens left. How many pens did she give away?



After





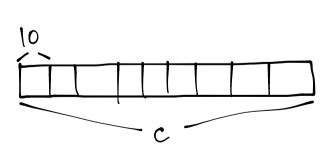
$$9x9 = p$$

$$9x9 = p$$
 there are 81  
 $p = 81$  pens total.

$$81-27 = m$$
  
 $m = 54$ 

81-27 = m She gave m = 54 away 54 pens.

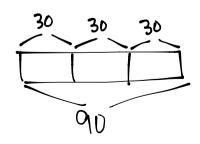
6. Allen buys 9 packs of trading cards. There are 10 cards in each pack. He can trade 30 cards for a comic book. How many comic books can he get if he trades all of his cards?



$$9 \times 10 = C$$

$$C = 90$$

There are 90 Cards



$$90 \div 30 = 3$$



Lesson 15: Date:

solve problems. 7/31/13

Interpret the unknown in multiplication and division to model and



3.D.46