$$6 \times 1 = 6 \times 2 = 6 \times 3 = 8 \times 4 = 4$$

$$6 \times 5 = \frac{30}{100}$$
  $6 \times 6 = \frac{36}{100}$   $6 \times 7 = \frac{42}{100}$   $6 \times 8 = \frac{48}{100}$ 

$$6 \times 9 = \frac{50}{6 \times 10} = \frac{60}{6 \times 5} = \frac{30}{6 \times 6} = \frac{36}{6 \times 6}$$

$$6 \times 5 = \frac{30}{6} \times 9 = \frac{51}{6} \times 5 = \frac{30}{6} \times 10 = \frac{60}{6}$$

$$6 \times 6 = 36$$
  $6 \times 5 = 30$   $6 \times 6 = 36$   $6 \times 7 = 42$ 

$$6 \times 6 = \frac{36}{6} \quad 6 \times 8 = \frac{48}{6} \quad 6 \times 6 = \frac{36}{6} \quad 6 \times 9 = \frac{54}{6}$$

$$6 \times 6 = \frac{36}{6}$$
  $6 \times 7 = \frac{42}{6}$   $6 \times 6 = \frac{36}{6}$   $6 \times 7 = \frac{42}{6}$ 

$$6 \times 8 = \frac{48}{6}$$
  $6 \times 7 = \frac{42}{6}$   $6 \times 9 = \frac{54}{6}$   $6 \times 7 = \frac{42}{6}$ 

$$6 \times 8 = 48$$
  $6 \times 6 = 36$   $6 \times 8 = 48$   $6 \times 7 = 42$ 

$$6 \times 8 = \frac{48}{6}$$
  $6 \times 9 = \frac{54}{6}$   $6 \times 9 = \frac{54}{6}$   $6 \times 6 = \frac{36}{6}$ 

$$6 \times 9 = 54$$
  $6 \times 7 = 42$   $6 \times 9 = 54$   $6 \times 8 = 48$ 

$$6 \times 9 = \frac{54}{6} \times 8 = \frac{48}{6} \times 6 = \frac{36}{6} \times 9 = \frac{54}{6}$$

## © Bill Davidson



Lesson 6: Date:

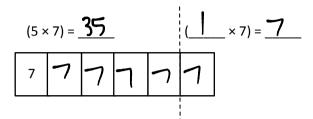
Use the distributive property as a strategy to multiply and divide using units of 6 and 7. 7/31/13

Name:

Date:

1. Label the tape diagrams. Then fill in the blanks below to make the statements true.

a. 
$$6 \times 7 = 42$$



$$(6 \times 7) = (5 + 1) \times 7$$

$$= (5 \times 7) + (1 \times 7)$$

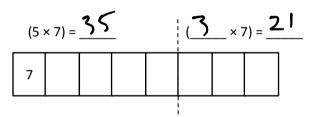
$$= 35 + 7$$

$$= 42$$

$$(5 \times 7) = 35$$

$$\boxed{2} \times 7) = 14$$

$$(7 \times 7) = (5 + 2) \times 7$$
  
=  $(5 \times 7) + (2 \times 7)$   
=  $35 + 14$   
=  $49$ 



$$8 \times 7 = (5 + \frac{3}{3}) \times 7$$

$$= (5 \times 7) + (\frac{3}{3} \times 7)$$

$$= \frac{35}{56} + \frac{21}{3}$$

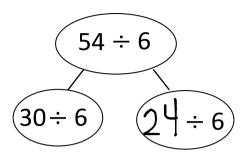
$$(5 \times 7) = 35$$

$$7$$

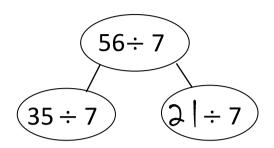
$$(4 \times 7) = 28$$

$$9 \times 7 = (5 + 4) \times 7$$
  
=  $(5 \times 7) + (4 \times 7)$   
=  $35 + 28$   
=  $43$ 

2. Break apart 54 to solve  $54 \div 6$ .



3. Break apart 56 to solve  $56 \div 7$ .

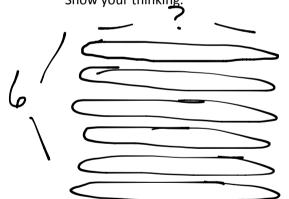


$$56 \div 7 = (35 \div 7) + (21 \div 7)$$

$$= 5 + 3$$

$$= 8$$

4. Forty-two third grade students sit in 6 equal rows in the auditorium. How many students sit in each row? Show your thinking.



5. Ronaldo solves  $7 \times 6$  by thinking of it as  $(5 \times 7) + 7$ . Is he correct? Explain Ronaldo's strategy.

Ronaldo is correct.

7x6 can be thought of as 6 sevens.
6 sevens = 5 sevens + 1 seven
= 5x7 + 7



Lesson 6: Date:

Use the distributive property as a strategy to multiply and divide using units of 6 and 7. 7/31/13



3.B.36