Unit 6 Assessment

① Jenny used doubling to solve 6×7 . This is what she did:

$$6 \times 7 = 3 \times 7 + 3 \times 7$$

 $6 \times 7 = 21 + 21$
 $6 \times 7 = 42$

a. Explain Jenny's work.

b. Use doubling to solve 3 × 8.

Draw a picture and write number models. You may use Jenny's work to help.

(2) Fill in the unit box. Then solve.



a. 7 5 3 - 3 5 8

3 In Baseball Multiplication, the greater the product from the dice roll, the better the hit.

For each pair of facts below, circle the one that would give a better hit.

a.
$$6 \times 6 \text{ or } 5 \times 8$$

b.
$$6 \times 9 \text{ or } 7 \times 7$$

c.
$$4 \times 3$$
 or 2×7

(4) Show a multiplication strategy that can be used to solve this fact:

$$8 \times 4 = ?$$

- (5) You have 48 stickers and want to divide them equally among 6 small bags. How many stickers do you put into each bag?
 - Write a number model to fit the story.
 Use a letter to represent what you want to find out.
 You may complete the diagram below to help.
 - Solve the number story.
 - Write the number model with your answer to check that your answer makes the number model true.

Letter and what it represents: _____ for _____

bags	stickers per bag	stickers in all

(number model with letter)

Answer:	
	(unit
(number model with any	Swor)

6 Magi and Katrina solved this number sentence: $3 \times (6 + 2) = ?$ Magi says the answer is 20, and Katrina says the answer is 24. Who is correct? Explain.

7 Andy used the order of operations to solve this number sentence.

 $3 + 6 \times 5 = 33$

Rules for the Order of Operations

- Do operations inside parentheses first. Follow rules 2 and 3 when computing inside parentheses.
- 2. Then multiply or divide, in order, from left to right.
- 3. Finally add or subtract, in order, from left to right.

Explain Andy's steps for solving the number sentence.

8 Solve.

Mrs. Sierra's class has 6 tables with 4 children at each table and a table with 3 children.

How many children are in Mrs. Sierra's class?

Number model: $(6 \times 4) + 3 = C$

a. Solve the number story using any strategy. Show your work.

Answer: _____(upit)

b. Explain how the number model fits the story.

Unit 6 Challenge

1 Melanie and Devon subtracted to solve the problem below.

This is Melanie's work.

This is Devon's work.

Who got the correct answer? Who made a mistake? Explain your thinking.

Unit 6 Challenge (continued)

Show how 6×8 can be solved using two different efficient multiplication strategies. Show your thinking with number sentences or words.

One way:

Another way:

3 Write a number story to fit this number sentence: $B \times 6 = 42$

B represents ______.

Number story: _____

Solve your number story. Record your answer with units.

(unit)