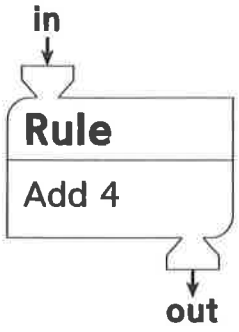
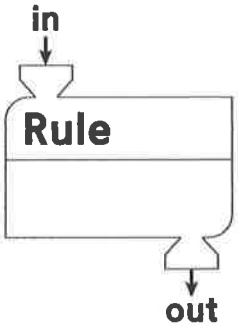
NAME DATE TIME Lesson 3-14

Unit 3 Assessment

Complete the tables. Write your own number pair in the last row of each table.

① 

in	out
14	
	12
7	
15	
	32

② 

in	out
10	1
13	4
30	
	43
	13

For each problem, use rounding to estimate and then solve.
Use your estimate to check whether your answer makes sense.
Show your work.

③ **a.** Estimate: _____

b.
$$\begin{array}{r} 169 \\ +\ 28 \\ \hline \end{array}$$

④ **a.** Estimate: _____

b.
$$\begin{array}{r} 82 \\ -\ 36 \\ \hline \end{array}$$

c. Does your answer make sense? Explain.

_____

_____

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Unit 3 Assessment (continued)

⑤ **a.** Estimate: _____

b.
$$\begin{array}{r} 386 \\ +145 \\ \hline \end{array}$$

c. Does your answer make sense? Explain.

_____

_____

⑥ **a.** Estimate: _____

b.
$$\begin{array}{r} 293 \\ -\ 85 \\ \hline \end{array}$$

⑦ Use the tally chart and the key to complete the picture graph.

3rd Grade Milk Choices

Kind of Milk	Number of Children
white	𝍸 𝍸 𝍸 𝍸 𝍸
chocolate	𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸 𝍸
no milk	𝍸 𝍸

3rd Grade Milk Choices

white □ □ □ □ □

chocolate

no milk

Key: □ = 5 children

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Unit 3 Assessment (continued)

(8) Use the turn-around rule to solve and draw arrays for each fact.

a. $5 \times 7 =$ _____ $7 \times 5 =$ _____

b. _____ $= 10 \times 3$ _____ $= 3 \times 10$

c. How does drawing arrays for these fact pairs help you understand the turn-around rule?

Unit 3 Assessment (continued)

⑨ Write a number sentence to match each array.

a. 

Number sentence: _____

b. 

Number sentence: _____

c. Which array, a or b, in Problem 9 shows a multiplication square? Explain.

_____

_____

_____

⑩ Li does not know the answer to 6 × 4.
She does know that 5 × 4 = 20, so she uses it as a helper fact.
Li starts by drawing this array for 5 × 4 = 20:

× × × ×
× × × ×
× × × ×
× × × ×
× × × ×

Show on the picture and explain how Li can use this array to help her figure out 6 × 4.

_____

_____

_____

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Unit 3 Challenge

(1) Elias likes to skip count equal groups when he is multiplying. He has to solve 10 × 4.

a. 10 × 4 means _____ groups of _____

4 × 10 means _____ groups of _____

b. How are 10 × 4 and 4 × 10 alike?

_____

_____

c. Would it be easier for Elias to skip count 4 groups of 10 or 10 groups of 4? Explain.

_____

_____

_____

_____

Unit 3 Challenge (continued)

② Logan wants to solve 8 × 7. She knows 10 × 7 = 70.

a. 10 × 7 means _____ groups of _____

8 × 7 means _____ groups of _____

b. Logan uses the subtracting-a-group strategy with 10 × 7 to help her figure out 8 × 7. Use numbers, pictures, or words to explain what Logan did.

8 × 7 = _____