Name _____ Date _____

Multiplication Facts Strategies

Self-Check: Questions 1–8

Show at least one way to solve each multiplication fact. Use drawings, number lines, and rectangles to show your strategy. Decide if you have a strategy or need a strategy and put an "X" in the appropriate box in each table.

1. 2×8

Twos

I need a strategy. (Julia)	I have a strategy. (Peter)

2. 3×4

Threes

I need a strategy. (Peter)	I have a strategy. (Julia)

3. 5×4

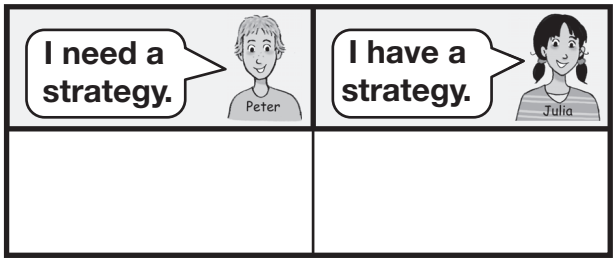
Fives

I need a strategy. (Peter)	I have a strategy. (Julia)

Name _____ Date _____

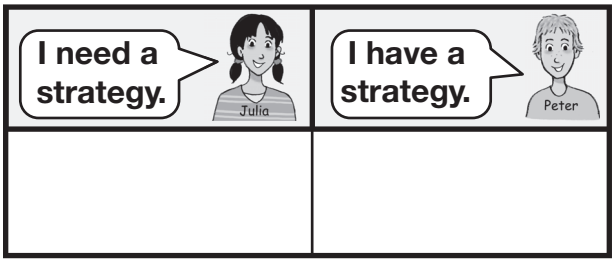
4. 7×10

Tens



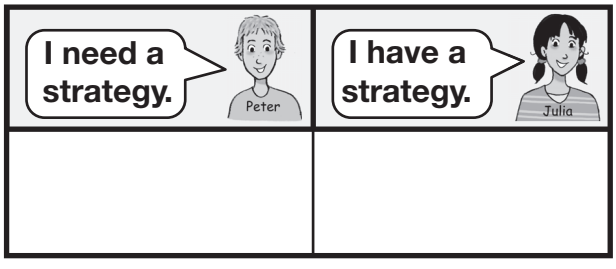
5. 9×3

Nine



6. 6×6

Square Numbers



7. Show or tell your partner why $0 \times 5 = 0$.

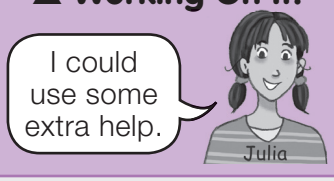
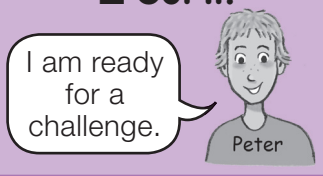
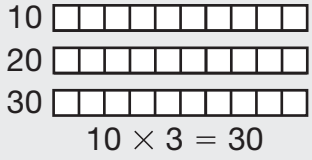
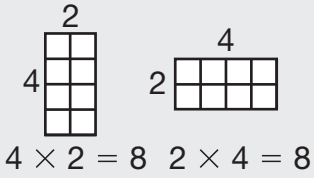
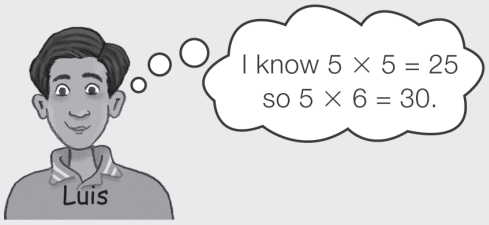
8. Show or tell your partner why $1 \times 8 = 8$.

Name _____ Date _____

Use Self-Check: Questions 1–8 and the Workshop Menu to choose practice with the strategies for the multiplication facts.

- **For each row decide whether you are "Working On It" or you "Got It."**
- **Remember, you may feel you are "Working On It" for one row, but for another row you "Got It."**
- **Circle the set of questions to choose your practice.**

Workshop Menu

Can I Do This?	▲ Working On It! 	■ Got It! 
Explain how to multiply by 0 and 1.	**Question 9**	
Use skip counting and repeated addition to solve multiplication facts. 	**Questions 10–11**	**Questions 12–13**
Use turn-around facts to solve multiplication facts. 	**Questions 14–18**	**Question 18**
Reason from known facts to solve multiplication facts. 	**Questions 19–20**	**Questions 21–22**

Name _____ Date _____

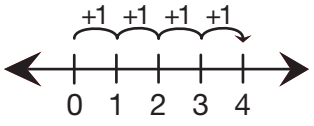
Multiply By 0 and 1

▲□□ **9.** Students wrote the following stories to explain how to multiply by 0 and 1. Decide if you agree or disagree with each explanation.

- If you agree, tell your partner a similar story for a different multiplication fact.
- If you disagree, correct the story.

A.

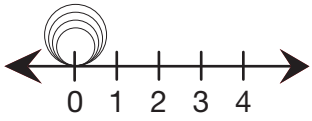
$4 \times 1 = 4$



4 hops of 1 stop on 4

B.

0×4 or 4×0



4 hops of 0 stop on 0

C.

$0 \times 5 = 5$

No group of 5 is 5.

D.

$1 \times 9 = 9$

1 row of 9 cubes is 9.

E.

$9 \times 1 = 9$

9 groups of 1 is 9.

F.

How many dimes? 3 groups × 1 dime = 3 dimes

How many nickels? 3 groups × 0 nickels = 0 nickels

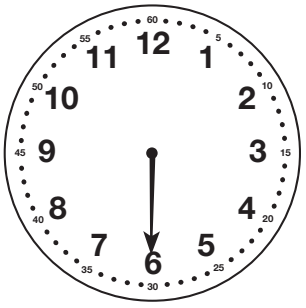
How many pennies? 6 groups × 1 penny = 6 pennies

G. Write a story similar to one of the stories in Questions A–F.

Name _____ Date _____

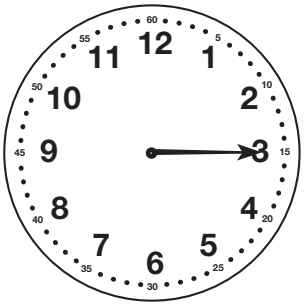
Skip Counting and Repeated Addition

▲ **10.** Each one-handed clock shows the minute hand. How many minutes after the hour is showing on each clock?



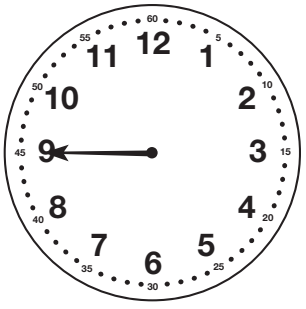
6×5

_____



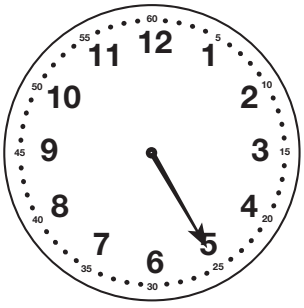
3×5

_____



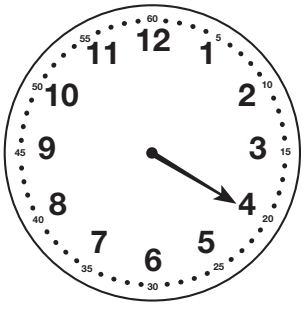
9×5

_____



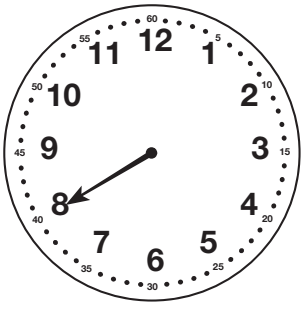
5×5

_____



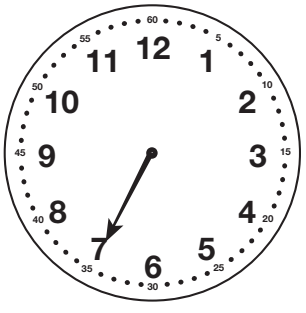
4×5

_____



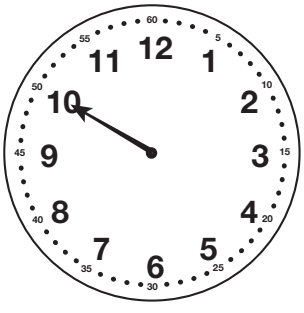
8×5

_____



7×5

_____



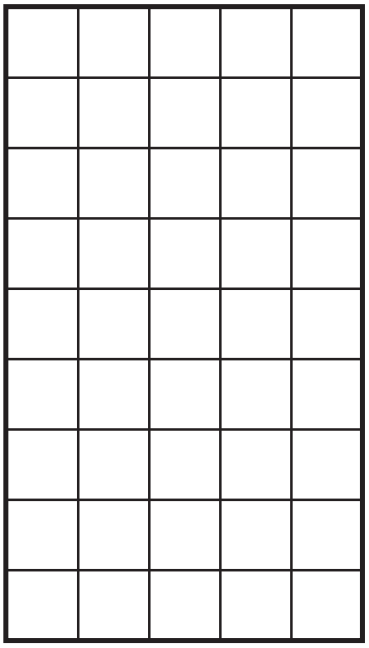
10×5

_____

Name _____ Date _____

▲□□ **11.** Each rectangle represents a multiplication fact. Write a number sentence for each rectangle. Show how to solve each problem.

A.



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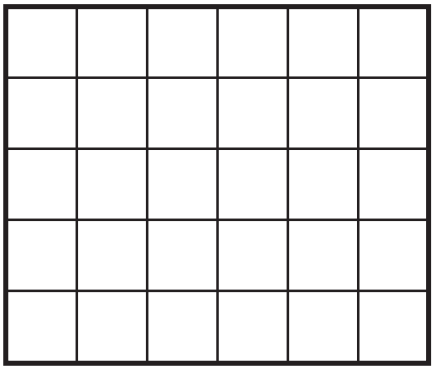
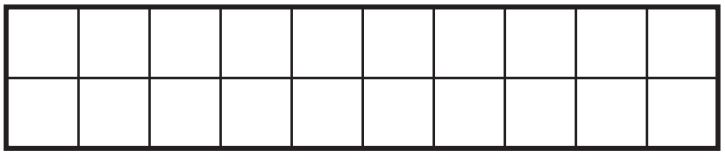
B.



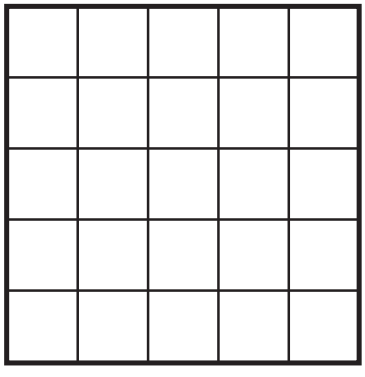
_____

C.



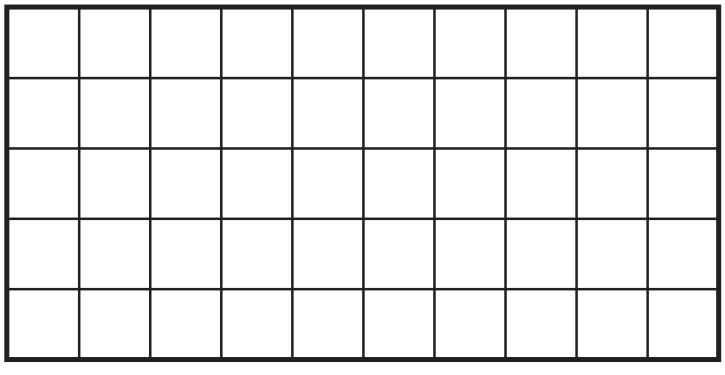
_____

D.



_____

E.

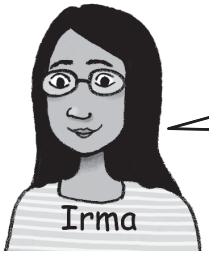


_____

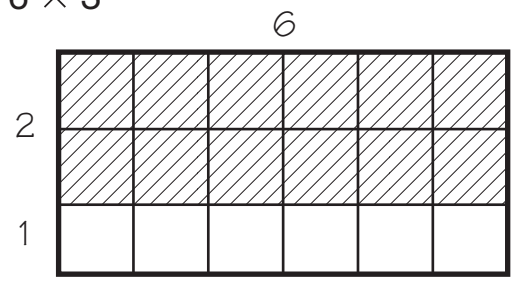
F. Show or tell how to solve Question E another way.

Name _____ Date _____

12. Irma used the double and then added one more to solve 6 × 3. Use her strategy to solve 5 × 3 and 8 × 3.

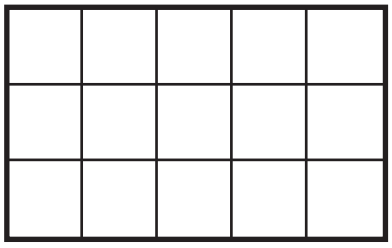


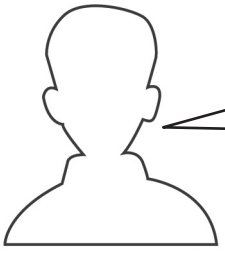
6 × 3



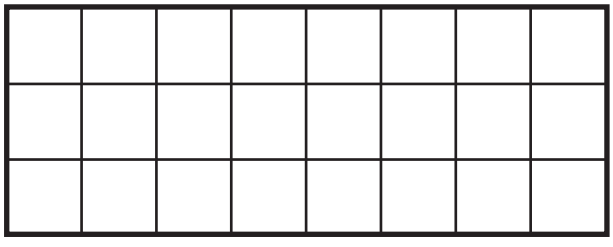
6 + 6 = 12 and one 6 is 18.

5 × 3





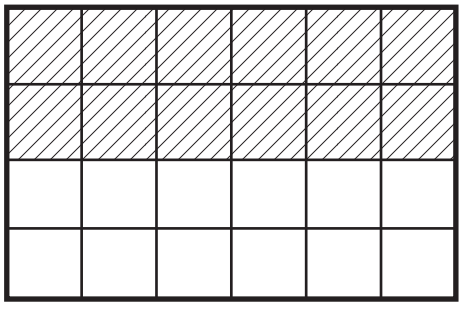
8 × 3



Name _____ Date _____

13. Peter used doubles and then added the doubles to solve 4 × 6. Use his strategy to solve 4 × 8 and 4 × 4.

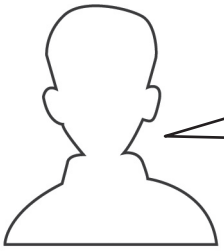
4 × 6



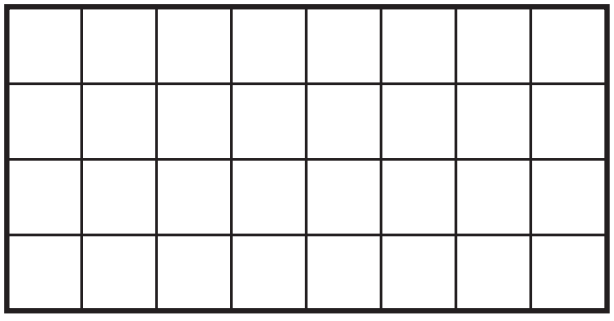
$$\begin{array}{r} 6 \\ +\ 6 \\ \hline 12 \end{array} \qquad \begin{array}{r} 6 \\ +\ 6 \\ \hline 12 \end{array}$$

12 + 12 = 24

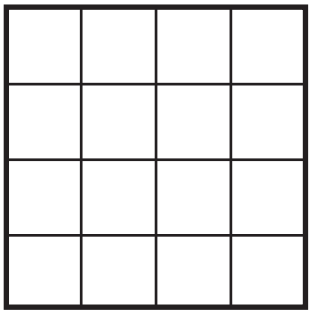
4 × 6 = 24



4 × 8



4 × 4



Name _____ Date _____

Turn-Around Facts

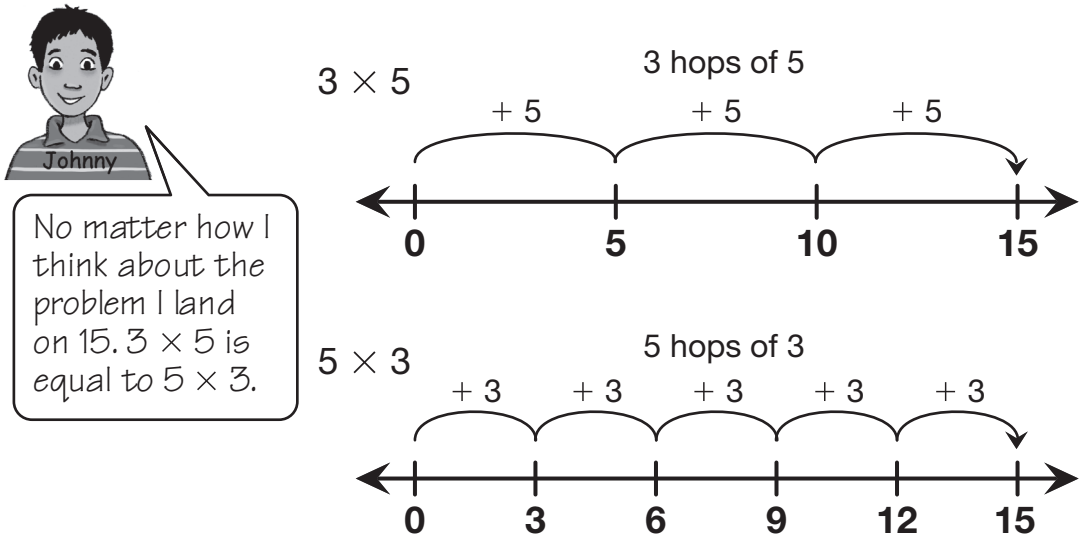
▲□□ **14.** Write a story for each multiplication fact.

5×3	3×5

▲□□ **15.** Is this number sentence true? Why or why not?

$$3 \times 5 = 5 \times 3$$

▲□□ **16.** Look at John's explanation.

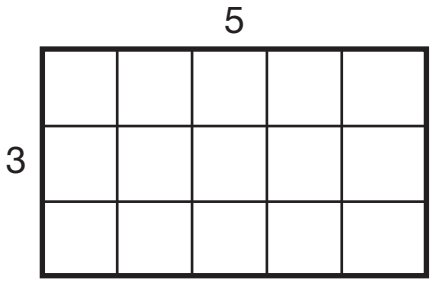


Do you agree with John? Why or why not?

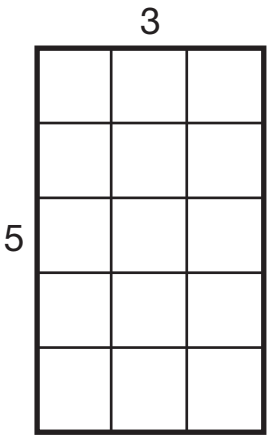
Name _____ Date _____

▲□□ **17.** Look at Shannon's explanation.

I thought about rectangles. No matter how you turn it the number of tiles is the same.



$3 \times 5 = 15$



$5 \times 3 = 15$

Do you agree with Shannon? Why or why not?

▲■ **18.** Which number sentences are true?

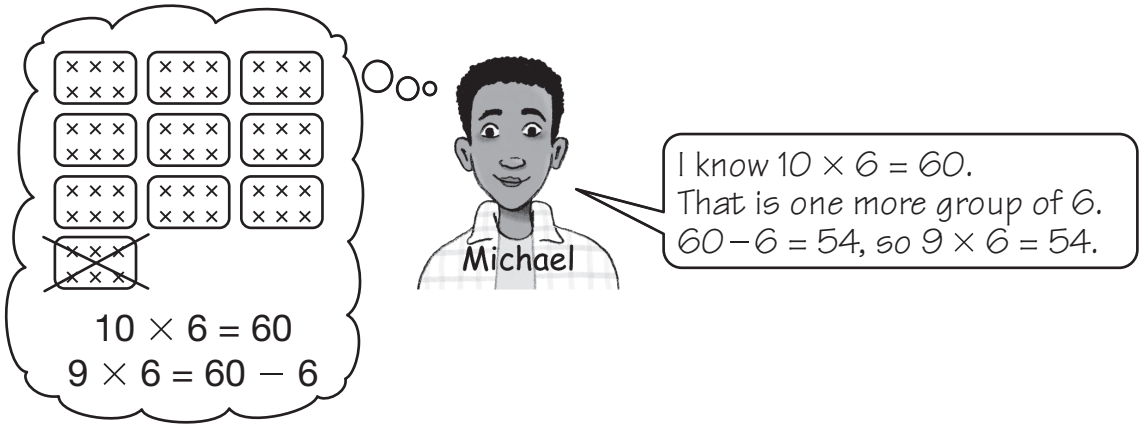
		True	False
A.	$10 \times 5 = 5 \times 10$		
B.	$4 \times 3 = 3 \times 4$		
C.	$9 \times 2 = 2 \times 9$		
D.	$3 + 5 = 5 + 3$		
E.	$8 - 2 = 2 - 8$		
F.	$25 \times 4 = 4 \times 25$		
G.	$82 \times 8 = 8 \times 82$		
H.	$35 \times 10 = 10 \times 35$		

I. Show or tell how you decided if Question B is true.

Name _____ Date _____

Reasoning Strategies

▲ **19.** Michael used the multiplication facts for the tens to solve 9 × 6.

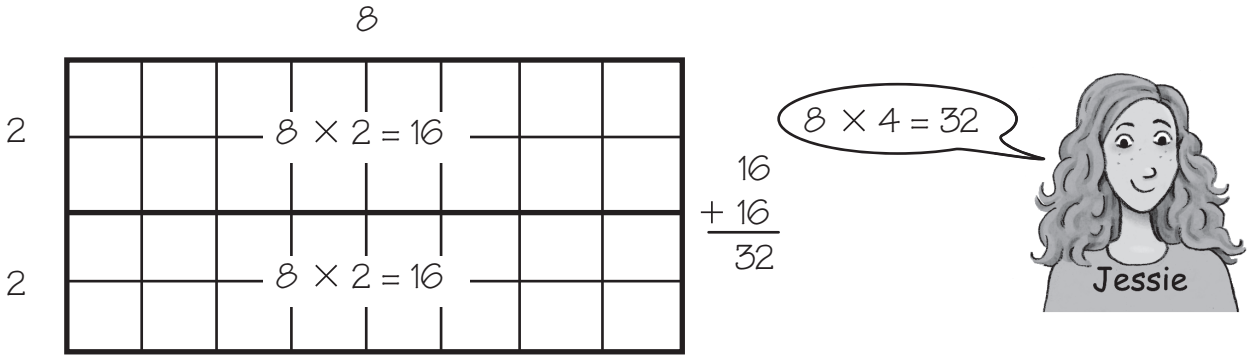


A. Show how to use Michael's strategy to solve 9 × 7.

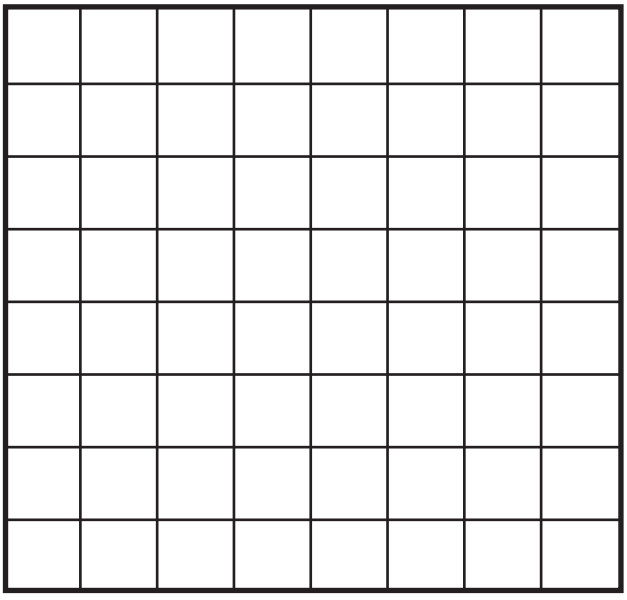
B. Show how to use 9 × 5 to solve 9 × 7.

Name _____ Date _____

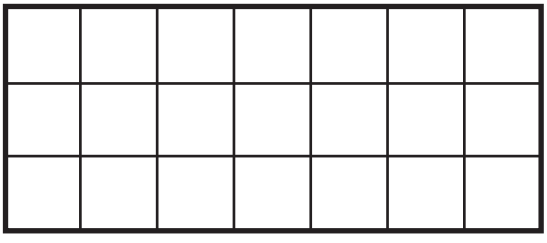
▲□□ **20.** Look at Jessie's strategy for solving 8 × 4.



A. Show how to use Jessie's strategy to solve 8 × 8.



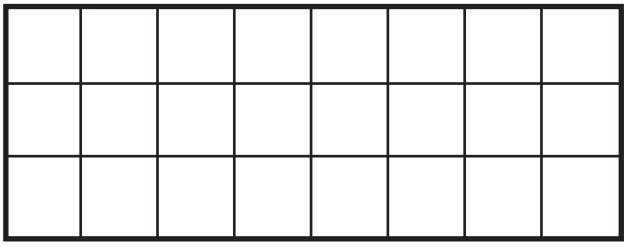
B. Show how to use a break-apart strategy to solve 3 × 7.



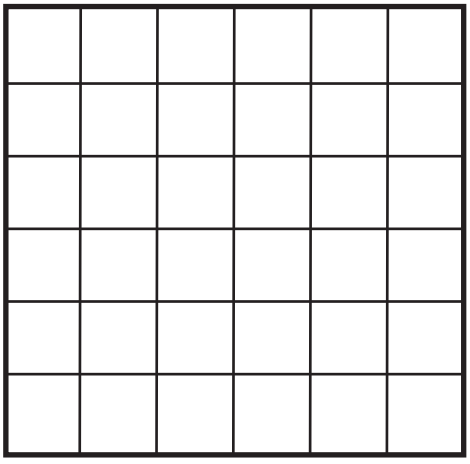
Name _____ Date _____

21. Each rectangle represents a multiplication fact. Use facts you know to find a stategy for solving each multiplication problem. Show your strategy.

A.



B.



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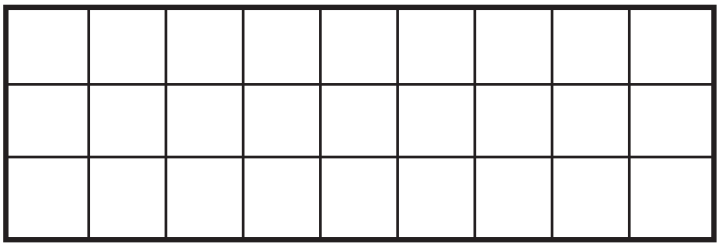

Name _____ Date _____

22. A. List three multiplication facts you are trying to figure out.

_____ _____ _____

B. Use the grid below to find a strategy to solve this list of facts.