## Investigate Factors

1 (MP) Use Tools The 28 cheerleaders will stand in equal rows. Use 28 square tiles to make as many different arrays as you can. Describe the arrays.
$\qquad$
$\qquad$
Write all the factor pairs for 28. $\qquad$
List all the factors of 28.
How many factors does 28 have? $\qquad$
How many different ways can the cheerleaders stand in equal rows?

2 Nick uses 16 cards for a math game. He will place them in a rectangular arrangement on the table. Use area models to show all the different ways Nick can place the cards.


Write all the factor pairs for 16. $\qquad$
List all the factors of 16. $\qquad$
How many factors does 16 have? $\qquad$
How many different ways can Nick arrange the cards? $\qquad$

## Test Prep

3 Lou wants to arrange 18 carpet squares in equal rows. Which arrays show how he can arrange the carpet squares? Select all the correct answers.
(A)

(C)
$\square \square \square \square \square \square \square \square \square \square$
(E) $\begin{aligned} & \square \\ & \square \square \\ & \square \square \\ & \square \square \\ & \square \square \\ & \square \square\end{aligned}$

4 Carrie writes these equations to model all the area models for 35 . How many factor pairs does 35 have?
(A) 2
(B) 3
(C) 4
(D) 8

$$
5 \times 7=35
$$

5 Which is a factor pair for 15 ?
(A) 15 and 30
(C) 5 and 3
(B) 10 and 5
(D) 2 and 1

$$
1 \times 35=35
$$

$$
7 \times 5=35
$$

$$
35 \times 1=35
$$

6 Select all of the factor pairs for 24.
(A) 1 and 24
(C) 3 and 9
(E) 4 and 20
(B) 2 and 12
(D) 4 and 6
(F) 12 and 12

## Spiral Review

7 Estimate. Then find the product.
Estimate: $\qquad$

36
$\begin{array}{r} \\ \times 49 \\ \hline\end{array}$

8 Anya has red and blue balloons. She has 8 red balloons and 4 times as many blue balloons as red. How many balloons does Anya have?

