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Module 13 Perimeter, Area, and Volume
Lesson 2 Area

# Independent <br> Practice 

13.2

## Find the area.

1. 


2. Circle $K$

3.

4.

5.

6.

7. A large banner in the shape of a parallelogram has a base of seven feet and a height of four feet. What is the area of the banner?
8. A rectangular swimming pool cover has an area of 340 square feet. The width of the cover is 17 feet. What is the length?
9. Jerome wants the perimeter of a rectangular vegetable garden to be 28 yards. Complete the table below to find the greatest and least possible areas that he can obtain by using whole-number dimensions only. Tell which dimensions give these areas.

| Length <br> $(\mathbf{y d})$ | Width <br> $(\mathbf{y d})$ | $\boldsymbol{P}$ <br> $(\mathbf{y d})$ | $\boldsymbol{A}$ <br> $\left.\mathbf{( y d}^{2}\right)$ |
| :---: | :---: | :---: | :---: |
| 1 |  | 28 |  |
| 2 |  | 28 |  |
| 3 |  | 28 |  |
| 4 |  | 28 |  |
| 5 |  | 28 |  |
| 6 |  | 28 |  |
| 7 |  | 28 |  |

10. A discus thrower must stand inside a circle that is 8 feet $2 \frac{1}{2}$ inches in diameter. Find the area of the circle to the nearest whole inch.
11. A doubles tennis court is nine feet wider than a singles tennis court. How much greater is the area of the doubles tennis court than the singles tennis court?


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## Journal

1. If you know the perimeter of a square, can you determine its area? How? What about for a rectangle that is not a square? Explain.
2. How is the formula for the area of a triangle related to the formula for the area of a parallelogram? Explain.
3. Explain how to find the length of the base of a triangle if you know the height and area of the triangle.
4. How can you find all the different whole-number dimensions of a rectangle whose perimeter is 26 feet long?

## Cumulative Review

Fill in the blanks.

1. $425 \mathrm{~min}=$ $\qquad$ h $\qquad$ $\min$
2. $748 \mathrm{~g}=$ $\qquad$ mg
3. $7.5 \mathrm{gal}=\ldots \quad \mathrm{pt}$
$\qquad$ pt
4. $74 \mathrm{yd}=$ $\qquad$ in.

## Perform the indicated operation.

5. $45 \mathrm{~h} \div 4$
6. $\begin{array}{r}22 \mathrm{~h} 47 \mathrm{~min} \\ +\quad 8 \mathrm{~h} 18 \mathrm{~min} \\ \hline\end{array}$
7. $128 \mathrm{~mL} \times 21$
8. 18 gal 2 qt
$-\quad 3 \mathrm{gal} 3 \mathrm{qt}$

Find the perimeter or circumference.

10.

11.

12.


## Additional Work Area

