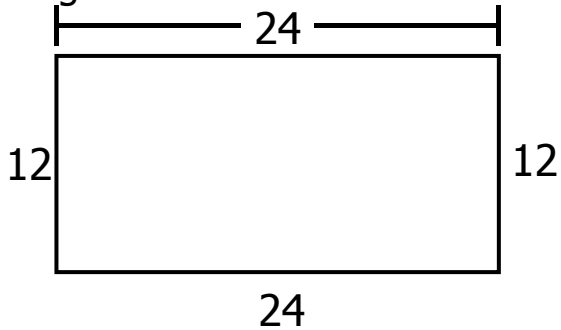


- A. The long side of a rectangle is 2 times the length of the short side. The rectangle's perimeter is 72 yd. How long is the short side? How long is the long side? What is the area of the rectangle?



$$p = 72$$

$$a = 288$$

$$a \quad 1u + 2u + 1u + 2u = 72$$

$$6u = 72$$

$$1u = 72 \div 6 = \underline{12}$$

$$\text{Short Side} = \underline{12}$$

$$b \quad 2 \times 12 = \underline{24}$$

$$c \quad 12 \times 24 = \underline{288}$$

- a The short side is 12 yd.  
 b The long side is 24 yd.  
 c The rectangle's area is 288 sq yd.

- B. The short side of the rectangle is  $\frac{1}{3}$  the length of the long side. The rectangle's perimeter is 104 yd. How long is the short side? How long is the long side? What is the area of the rectangle?

- a The short side is \_\_\_\_\_ yd.  
 b The long side is \_\_\_\_\_ yd.  
 c The rectangle's area is \_\_\_\_\_ sq yd.

---

A. The long side of a rectangle is 4 times the length of the short side. The rectangle's perimeter is 140 mi. How long is the short side? How long is the long side? What is the area of the rectangle?

- a The short side is \_\_\_\_ mi.  
b The long side is \_\_\_\_ mi.  
c The rectangle's area is \_\_\_\_\_ sq mi.

---

B. The short side of the rectangle is  $\frac{1}{5}$  the length of the long side. The rectangle's perimeter is 180 mi. How long is the short side? How long is the long side? What is the area of the rectangle?

- a The short side is \_\_\_\_ mi.  
b The long side is \_\_\_\_ mi.  
c The rectangle's area is \_\_\_\_\_ sq mi.

- A. The long side of a rectangle is 6 times the length of the short side. The rectangle's perimeter is 224 m. How long is the short side? How long is the long side? What is the area of the rectangle?

- a The short side is \_\_\_\_\_ m.  
b The long side is \_\_\_\_\_ m.  
c The rectangle's area is \_\_\_\_\_ sq m.

- 
- B. The short side of the rectangle is  $\frac{1}{7}$  the length of the long side. The rectangle's perimeter is 272 m. How long is the short side? How long is the long side? What is the area of the rectangle?

- a The short side is \_\_\_\_\_ m.  
b The long side is \_\_\_\_\_ m.  
c The rectangle's area is \_\_\_\_\_ sq m.

Name:

Problem of the Day Lesson 82

---

Seth wants to buy a rectangular parcel of land. The long side is 4 times the short side. There is 490 meters of fencing around the perimeter. Seth needs at least 9,600 square meters to graze his cattle. Should Seth buy the land? Explain your reasoning.

Name: \_\_\_\_\_

## GO FIGURE - B

Use the numbers from the bank and the provided clues to correctly label the sides of each rectangle. Each number can be used only once. *Figures are not drawn to scale.*

Number Bank

2 3 4 5 6 7 8 9 10

\_\_\_\_\_ in

Area and  
perimeter are  
the same  
(quantity)

\_\_\_\_\_ in

<p style="text-align: center;">_____ in</p> <div style="border: 1px solid black; padding: 10px; width: 80%; margin: 0 auto;"><p style="text-align: center;">Perimeter is 22 in</p></div> <p style="text-align: center;">_____ in</p>	<p style="text-align: center;">_____ in</p> <div style="border: 1px solid black; padding: 10px; width: 80%; margin: 0 auto;"><p style="text-align: center;">Long side is 2 in longer than than short side</p></div> <p style="text-align: center;">_____ in</p>
<p style="text-align: center;">_____ in</p> <div style="border: 1px solid black; padding: 10px; width: 80%; margin: 0 auto;"><p style="text-align: center;">Short side is <math>\frac{1}{3}</math> as long as long side</p></div> <p style="text-align: center;">_____ in</p>	<div style="border: 1px solid black; padding: 10px; width: 80%; margin: 0 auto;"><p style="text-align: center;">Perimeter is 38 in</p></div> <p style="text-align: center;">_____ in</p>

\_\_\_\_\_ in