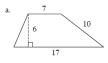Review & Preview

5-114. Solve for the missing side lengths and angles in the triangle at right.
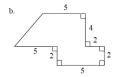

5-115. **Examine** the triangle shown at right. Solve for x twice, using two different methods. Show your work for each method clearly.

5-116. In Chapter 1 you learned that all rectangles are parallelograms because they all have two pairs of opposite parallel sides. Does that mean that all parallelograms are rectangles? Why or why not? Support your statements with **reasons**.

5-117. Find the area and perimeter of each shape below. Show all work.

a.

b.

5-118. $\triangle ABC$ was reflected across the x-axis, and then that result was rotated 90° clockwise about the origin to result in $\triangle A'B'C'$, shown at right. Find the coordinates of points A, B, and C of the original triangle.

5-119. Find the equation of a line parallel to the line $y = \frac{3}{4}x - 5$ that passes through the point $(-4, 1)$. Show how you found your answer.

5-120. **Examine** trapezoid $ABCD$ at right.

a. Find the measures of all the angles in the diagram.

b. What is the sum of the angles that make up the trapezoid $ABCD$? That is, what is $m\angle A + m\angle ABC + m\angle BCD + m\angle D$?

5-121. Use your triangle tools to solve the problems below.

a. Find PR in the diagram at right.

b. Find the perimeter of quadrilateral $PQRS$.

5-122. Find the area and perimeter of $\triangle ABC$ at right. Give approximate (decimal) answers, not exact answers.

5-123. Earl still hates to wash the dishes and take out the garbage. (See problem 5-9.) He found his own weighted coin, one that would randomly land on heads 30% of the time. He will flip a coin once for each chore and will perform the chore if the coin lands on heads.

a. What is the probability that Earl will get out of doing both chores?

b. What is the probability that Earl will have to take out the garbage, but will not need to wash the dishes?

5-124. On graph paper, draw $\triangle ABC$ if $A(3, 2)$, $B(-1, 4)$, and $C(0, -2)$.

a. Find the perimeter of $\triangle ABC$.

b. Dilate $\triangle ABC$ from the origin by a factor of 2 to create $\triangle A'B'C'$. What is the perimeter of $\triangle A'B'C'$?

c. If $\triangle ABC$ is rotated 90° clockwise (↻) about the origin to form $\triangle A''B''C''$, name the coordinates of C''.

5-125. Solve each equation below for x. Check your solution if possible.

a. $\frac{4}{5}x - 2 = 7$

b. $3x^2 = 300$

c. $\frac{4x-1}{2} = \frac{x+5}{3}$

d. $x^2 - 4x + 6 = 0$