Name: $\qquad$ Date: $\qquad$ Period: $\qquad$

## Perimeter \& Equations

For each situation below, write and solve an equation using the information provided.

1) The equilateral triangle shown below has a perimeter of 120 meters. Find the value of $x$.

2) The rectangle shown has side lengths as indicated. If the perimeter is 66 inches, what is the value of $y$ ?

3) The perimeter of the trapezoid below is 315 feet. Find the value of d that makes this possible.

4) Greg is fencing in a rectangular garden with a length of 13 feet. He has 64 feet of fencing and doesn't want any leftover. Find the width of Greg's garden.

5) A rectangular picture frame has side lengths shown. If the perimeter of the frame is 106 centimeters, what does s equal?


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6) A trapezoidal table is shown to the right. Write and solve an equation to find the value of $\dagger$ so that the perimeter of the table is equal to 218 inches.

7) A regular heptagon (7-sided figure where all sides are equal) has perimeter of 322 feet and a side length of 2 h .
A) Solve for $h$.
B) How long is each side?


2h
8) The perimeter of triangle $A B C$ (shown below) is 132 inches. Find the length of each side. Write your answers in the appropriate blank.
A. Solve for w:
B. Length of $A B$ : $\qquad$
C. Length of AC: $\qquad$
D. Length of $B C$ : $\qquad$

9) Trapezoid MATH below has a perimeter of 194.

A. Length of MA: $\qquad$ B. Length of AT: $\qquad$
C. Length of HT: $\qquad$ D. Length of MH : $\qquad$
10) The perimeter of the triangle is 126 units. Find the measure of each side.


