Name: _____ Date: _____ Period: ____

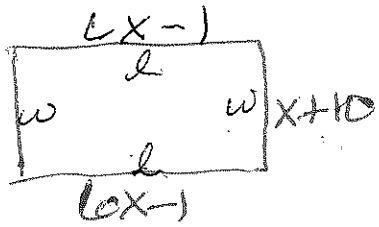
$l = 6x - 1$
$l = 6(8) - 1$
$l = 47$ meters

$w = x + 10$
$w = 8 + 10$
$w = 18$ meters

Warm Up: Geometric Applications

l & w

The length of a rectangle is (6x-1) meters and the width is (x+10) meters. Find the dimensions of the rectangle if the perimeter is 130 meters.



$P = 2l + 2w$

$130 = 2(6x-1) + 2(x+10)$

$130 = 12x - 2 + 2x + 20$ CLT

$130 = 14x + 18$

$-18 \quad -18$

$\frac{112}{14} = \frac{14x}{14}$

$8 = x$

47m x 18m