**2-101.** Draw the triangle below on graph paper. Then draw a square on and use it to find the length of .



 **2-102.** **Examine** the rectangle below.



1. What is the perimeter in terms of *x*? In other words, find the perimeter.
2. If the perimeter is 78 cm, find the dimensions of the rectangle. Show all your work.
3. Verify that the area of this rectangle is 360 sq. cm. Explain how you know this.

 **2-103.** **Examine** the arrow diagram below.

*Polygon is a parallelogram* → *area of the polygon equals base times height.*

1. Write this conjecture as a conditional (“If, then”) statement.
2. Write a similar conjecture about triangles, both as a conditional statement and as an arrow diagram.

**2-110.** Write the equation of each line described below in slope-intercept form (*y* = *mx* + *b*).

1. *m* = and *b* = −3
2. *m* = and *b* = 4.5
3. *m* = and the line passes through the origin (0, 0)
4. *m* = 0 and *b* = 2