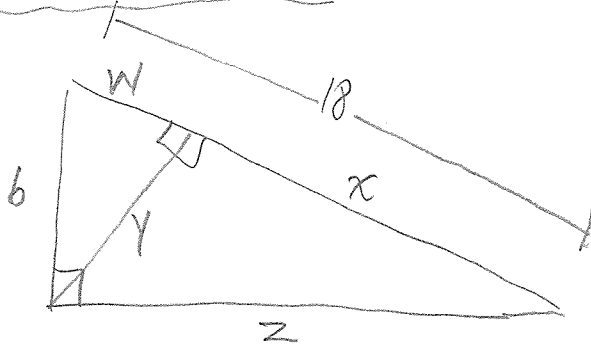
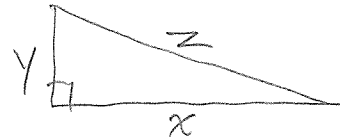


Lesson 8-1

MODEL PROBLEM



Draw the 2 small As to face the same way so that corresponding sides match.



Find the values of w, x, y, z .

Step 1: Find w .

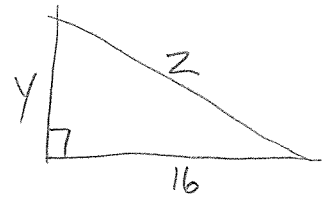
Compare to: $\frac{h}{l_1} = \frac{l_1}{hs_1} \leftarrow w$

$$\frac{18}{6} = \frac{6}{w}$$

$$18w = 36$$

$$w = 2$$

$\leftarrow hs_1$



step 2: Find x :

$$18 - 2 = x$$

$$16 = x$$

$\leftarrow hs_2$

Step 3: Find y . (AL)

Compare to: $\frac{hs_1}{AL} = \frac{AL}{hs_2}$

$$\frac{2}{y} = \frac{y}{16}$$

$$y^2 = 32$$

$$y = 4\sqrt{2}$$

Step 4: Find z (L_2 , long leg)

Compare to: $\frac{h}{l_2} = \frac{l_2}{hs_2}$

$$\frac{18}{z} = \frac{z}{16}$$

$$z^2 = 16(18)$$

$$z^2 = \sqrt{288}$$

$$z = 12\sqrt{2}$$