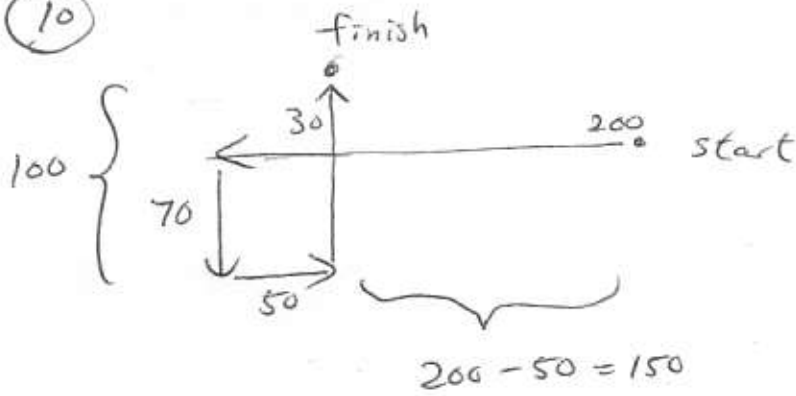


10

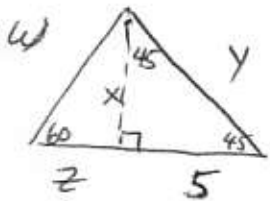


$$d^2 = 30^2 + 150^2$$

$$d = \sqrt{30^2 + 150^2}$$

direction is north west

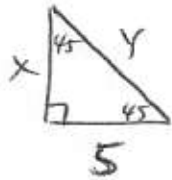
11



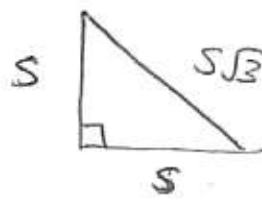
w = ?  
y = ?  
z = ?

This figure is composed of  
2 triangles, a 45-45-90 and  
a 30-60-90.

We start working with the 45-45-90  
since it has a known side of 5



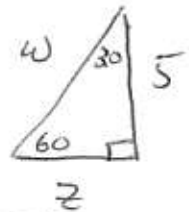
We then equate the 45-45-90 to  
the template of



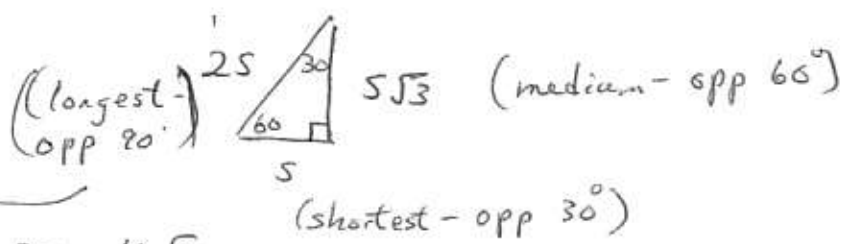
so  $s = 5$   
 $x = s = 5$

Now that  $x = 5$ ,

$$y = 5\sqrt{3} = 5\sqrt{3}$$



We then equate the 30-60-90  
to the template of



so  $5 = 5\sqrt{3}$   
 $\frac{5}{\sqrt{3}} = s$

$$z = s = \frac{5}{\sqrt{3}} = \frac{5\sqrt{3}}{\sqrt{3}\sqrt{3}} = \frac{5\sqrt{3}}{3} \quad \& \quad w = 2s = \frac{10\sqrt{3}}{3}$$