Correct. Use the definition of tangent together with the given information to find *u*:

$$\frac{u}{30} = \frac{8}{15} \Rightarrow 15u = 240 \Rightarrow u = 16$$

Now use the Pythagorean Theorem to find the hypotenuse *w*:

 $w^2 = 30^2 + 16^2 \Rightarrow w^2 = 900 + 256 \Rightarrow w^2 = 1156 \Rightarrow w = 34$