Unit Circle Worksheet

Solve for θ in the equation $\sin(\theta) = \cos(\theta)$, where $0° \leq \theta < 360°$

Using the unit circle, explain how you would calculate the height of a tree if you know the angle of elevation to the top of the tree is 30° from a point 40 meters from its base.

True or False

Question	✓	X
The sine of 90° is 1.		
Cosine values are negative in the first quadrant of the unit circle.		
The tangent of 270° is undefined.		
The coordinates (1, 0) correspond to 0° on the unit circle.		
The cosine of 180° is greater than the cosine of 360°.		
For all angles θ on the unit circle, $\sin(\theta)$ equals $\cos(90° - \theta)$		
The angle 225° has a negative sine value		
The radian measure of 360° is 2π radians.		
If $\cos(\theta) = 0.5$, then θ could be either 60° or 300°		