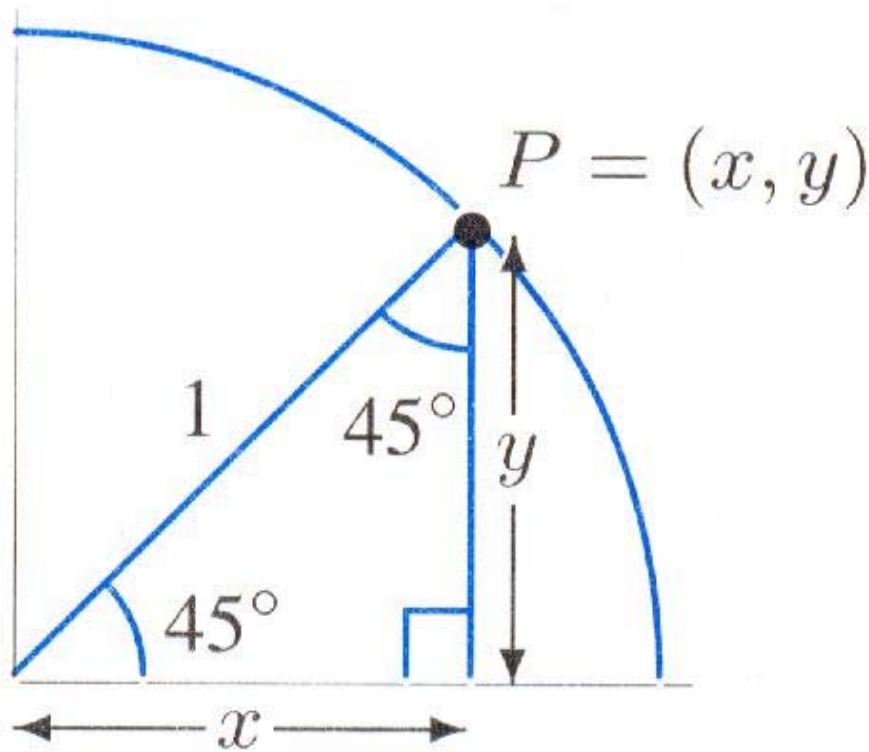


**Exact trigonometric values of the special angles  $45^\circ$ ,  $30^\circ$ , and  $60^\circ$**



How does the value of  $x$  compare with the value of  $y$ ? Explain why.

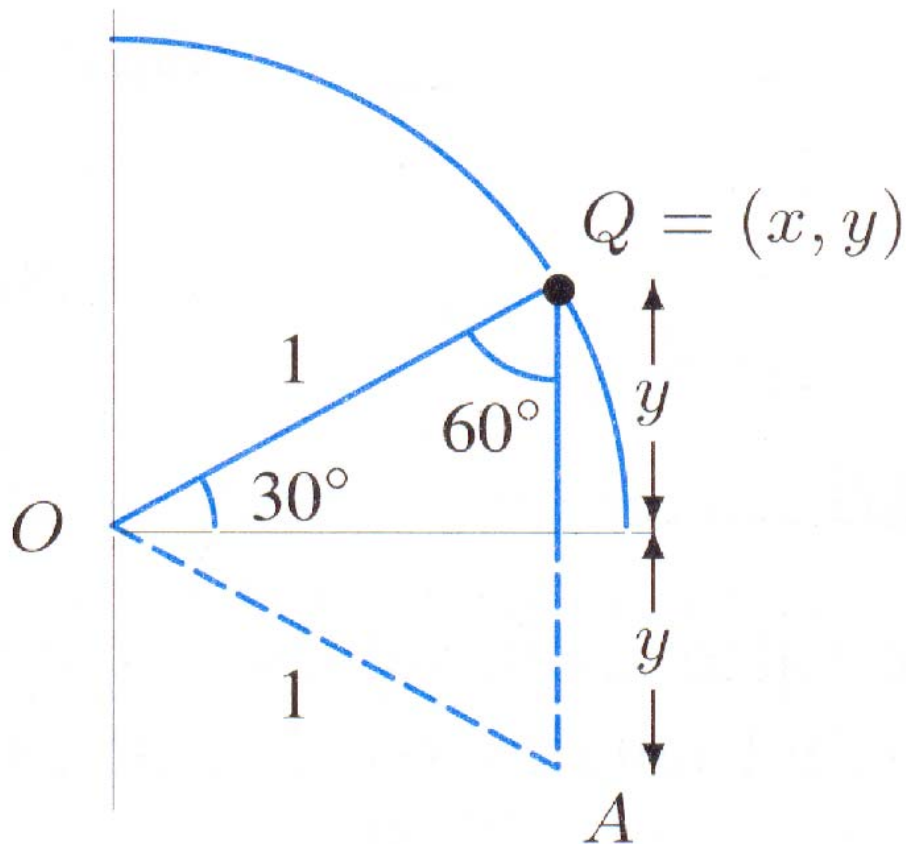
What are the values of  $x$  and  $y$ ?

(Tip: Can Pythagoras help?)

Give the exact value of each:

$$\cos 45^\circ =$$

$$\sin 45^\circ =$$



1. What is the measure of angle  $OAQ$ ? \_\_\_\_\_
2. What is the length of side  $QA$  (or  $2y$ )? \_\_\_\_\_  
What is the value of  $y$ ? \_\_\_\_\_
3. What is the value of  $x$ ? (Tip: Can Pythagoras help?)

4. Give the exact value of each:

$$\cos 30^\circ =$$

$$\sin 30^\circ =$$

$$\cos 60^\circ =$$

$$\sin 60^\circ =$$

(Tip: Find coordinates of  $R$ )

