That was sneaky of you to change the orientation. Can't fool me. The opposite side is 3 and the hypotenuse is 5 , so $\sin (\theta)=\frac{3}{5}$. You didn't give me the adjacent side though.

You have to figure it out on your own.

I can't find my Ouija board, so you might have to give me a hint.

Wait. It's just the Pythagorean Theorem. If the missing side is $x$, then

$$
x^{2}+3^{2}=5^{2} \quad \Longrightarrow \quad x^{2}=16 \quad \Longrightarrow \quad x=4 .
$$

Since the adjacent side is 4 , then $\cos (\theta)=\frac{4}{5}$ and $\tan (\theta)=\frac{3}{4}$. Tada!
$\pi^{2}$ Ah yes. The student has become the master.

Do you remember radians?

Could you remind me please?

Radians are an angle measure just like degrees, except that they are more useful. If your circle has a radius of 1 , then the radian measure matches the arc length. Thus $360^{\circ}=2 \pi$ rad.


Ugh. Mr. Martin made us memorize that whole circle last semester. I've totally purged it from my memory.

Not a wise move. You'll want to memorize it again. The symmetry makes it easier to memorize.

