

CALC

FORMS CW 8/28/20

1. What ratio of triangle sides is represented by the tangent function?

opposite over adjacent

2. Convert $3\pi/10$ radians to degrees

- 33 degrees
- 180 degrees
- 54 degrees
- 330 degrees

$$\frac{3\pi}{10} = \frac{540}{10} = 54^\circ$$

3. Convert 200 degrees to radians

- $10\pi/9$ radians
- 200 radians
- $\pi/200$ radians
- $5\pi/3$ radians

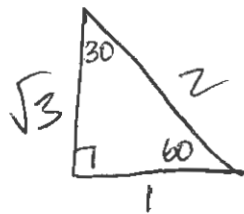
$$\frac{200}{180} \left(\frac{\pi \text{ rad}}{1} \right) = \frac{10\pi}{9}$$

4. In a 30-60-90 special right triangle, if the hypotenuse is 6 units, how long is the short leg?

3

5. Draw a 30-60-90 special right triangle with a hypotenuse of 2. Fill in the lengths of the legs. Now use your drawing to find the $\tan(60 \text{ degrees})$.

- 1/2
- $\sqrt{3}$
- $1/\sqrt{3}$
- $\sqrt{3}/2$



$$\begin{aligned} 1^2 + b^2 &= 2^2 \\ b^2 &= 3 \\ b &= \sqrt{3} \end{aligned}$$

$$\tan 60^\circ = \sqrt{3}$$