

TRIGONOMETRIC FUNCTIONS – REVIEWING THE FIRST THREE LESSONS

HOW'S IT GOING?

- 1) State the related acute angle for $-\frac{13\pi}{16}$.
- 2) Convert 126° to radians. Round to the nearest tenth.
- 3) Convert $\frac{9\pi}{7}$ radians to degrees. Round to the nearest tenth.
- 4) Convert 5 radians to degrees. Round to the nearest hundredth.
- 5) Convert 76° to radians. Express your answer in exact form.
- 6) Determine the exact value of $\sin\left(\frac{5\pi}{3}\right)$.
- 7) Determine the exact value of $\sec(-570^\circ) - \tan^2(240^\circ)$.
- 8) A pulley with a radius of 4.5 cm makes 180 rotations in 4 minutes.
 - a) Determine the pulley's angular velocity in radians per second. Express your answer in exact form.
 - b) How far does a point on the outer edge of the pulley travel in 3 minutes? Round to the nearest tenth of a centimetre.
- 9) If $\csc \theta = -2$ and $0 \leq \theta \leq 2\pi$, determine all the possible values of θ .
- 10) State the domain of the function $y = \tan x$ using radian measure.