

Quiz 6 - Math 112, Sections 20-22

Calculators are **not** allowed for this exam. Please mark your final answers clearly. Give exact answers.

1. Evaluate the following.

(a) $\tan\left(\frac{\pi}{3}\right) = \sqrt{3}$

(b) $\sin\left(\frac{7\pi}{6}\right) = -\frac{1}{2}$

(c) $\cos\left(\frac{3\pi}{4}\right) = -\frac{\sqrt{2}}{2}$

(d) $\csc\left(\frac{\pi}{2}\right) = 1$

(e) $\cot(5\pi) = \text{UNDEFINED}$

(f) $\sec\left(\frac{11\pi}{6}\right) = \frac{2\sqrt{3}}{3}$

2. Consider the function

$$f(x) = 3 \tan\left(\frac{\pi}{2}x - 3\pi\right)$$

State the following values:

Period:

Phase Shift:

Graph the function on the axes below.

