

Name: _____ Quiz Score: _____ /20

Quiz 4

NO CALCULATORS.

Consider the function $f(x) = -1 + 3 \cos\left(\frac{1}{2}x + \frac{\pi}{6}\right) = -1 + 3 \cos\left[\frac{1}{2}\left(x + \frac{\pi}{3}\right)\right]$.

1. Find each of the following.

(a) (2 pts) amplitude: _____

(b) (2 pts) period: _____

(c) (2 pts) phase shift (horizontal translation): _____

(d) (2 pts) vertical translation: _____

2. (8 pts) Sketch the graph $y = f(x)$. Fill out the whole coordinate grid.

3. (4 pts) Plot and label (with their ordered pairs) the 5 important points in one period.

