

(C2-8.6) Name:

Homework Questions 6 – Transformation of Trigonometric Graphs

1. State the amplitude of the following graphs, and hence give the coordinates of the first maximum and minimum point to occur after (0,0)

a) $y = 4 \cos x$

b) $y = 3 \sin x$

c) $y = \frac{1}{2} \sin 2x$

d) $y = -\cos x$

e) $y = \frac{1}{2} \sin 3x$

2. State the period of the following graphs

a) $y = \cos x$

b) $y = 3 \sin 2x$

c) $y = \cos \frac{x}{2}$

d) $y = \sin 3x$

e) $y = \cos \frac{x}{4}$

3. Describe the transformation that has taken place in each of the following

a) $y = \cos 2x$

b) $y = \sin \left(x - \frac{\pi}{3} \right)$

c) $y = 2 \cos x$

d) $y = \sin x + 2$

e) $y = -\tan x$

f) $y = \sin(-x)$

4. State the asymptotes of the graph $y = \tan(\theta - \pi)$ for $-2\pi \leq \theta \leq 2\pi$

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