

MAT 126: Trigonometry
Review for Final Exam Solutions

1. a) $\frac{-2\sqrt{85}}{85}$

b) $\frac{\sqrt{33}}{7}$

c) $\frac{-9\sqrt{85}}{85}$

d) $\frac{-4}{7}$

e) $\frac{9}{2}$

f) $\frac{-\sqrt{33}}{4}$

g) $\frac{-\sqrt{85}}{4}$

h) $\frac{7\sqrt{33}}{33}$

i) $\frac{36\sqrt{85} + 2\sqrt{2805}}{595}$

j) $\frac{36}{85}$

k) $\frac{-2}{\sqrt{85}-9} = \frac{-2\sqrt{85}-18}{4}$

2. a) $\frac{\pi}{10}$ b) 1260 degrees c)

d) $\frac{11\pi}{10}$ $\frac{22\pi}{5} \approx 13.8$

3. a) $\frac{97}{7} \approx 13.86$

b) 60, 300, 180

c) 75, 105, 255, 285

4 a) a = 4.59 ft. b = 6.55 ft.

b)

5 a) 483 ft.

b) 10 miles

c) 2.86 mph

6 a) 13963 m^2

b) 1815 m^2

7. a) $a = 3$ $P = \frac{\pi}{3}$

b) $a = 2$ $P = 4\pi$

8. 5