

Answers for Review for Exam Two for Math 1523

5.1 → 1) a)  $\cot x$    b)  $\sin x$    c)  $\sec^2 x$    e) 29   f) 1

2) a) False   b) False

5.2 → 1) a)  $\frac{56}{65}$    b)  $\frac{63}{65}$    c)  $\frac{63}{16}$

2) a)  $\sin\left(x - \frac{\pi}{12}\right)$    b)  $\tan(4 - y)$

3)  $\cos x$    4)  $\frac{171}{221}$

5.3 → 1) a)  $-\frac{24}{25}$    b)  $-\frac{7}{25}$    c)  $-\frac{1}{2}$

2) a)  $\frac{840}{1369}$    b)  $\frac{6}{\sqrt{37}}$    c)  $\frac{840}{1081}$

3)  $-\frac{119}{169}$

5.5 → 1) a)  $\frac{\pi}{2}, \pi, \frac{3\pi}{2}$    b)  $\frac{7\pi}{6}, \frac{11\pi}{6}$    c)  $\frac{\pi}{6}, \frac{5\pi}{6}, \frac{7\pi}{6}, \frac{11\pi}{6}$

d)  $\frac{3\pi}{2}$    e)  $\frac{\pi}{4}, \frac{3\pi}{4}, \frac{5\pi}{4}, \frac{7\pi}{4}$    f)  $\frac{\pi}{6}, \frac{5\pi}{6}, \frac{7\pi}{6}, \frac{11\pi}{6}$

2) 18.4, 71.6, 198.4, 341.6 (degrees) or 0.32, 2.82, 3.46, 5.96 (radians)

3)  $\frac{7\pi}{6} + 2\pi n$  ;  $\frac{11\pi}{6} + 2\pi n$

6.1 → 1) a) 41.5   b) 48.5   c) 26.5   d) 26.6   e) No answer   f) 38.4

2) a) 752.2   b) 200.4   c) 233.5

6.2 → 1) a) 13.4   b) 37.7   c) 90   d) No Answer   e) 128

2) a) 160.6   b) 38.5   3) 4919