

Pre-Calculus Mid-Term Review Sheet 2

Answer Section

1. ANS:

$$\sin \theta = \frac{1}{2}; \cos \theta = \frac{\sqrt{3}}{2}; \tan \theta = \frac{\sqrt{3}}{3}; \cot \theta = \sqrt{3}; \sec \theta = \frac{2\sqrt{3}}{3}; \csc \theta = 2$$

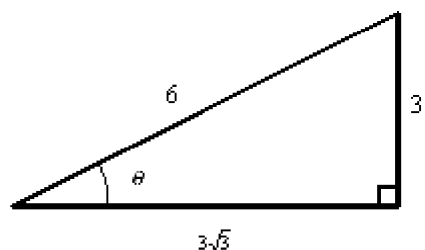
PTS: 1 DIF: Level B REF: HMPC0296 TOP: Objective 1

KEY: right | triangle | function | trigonometry | sine | cosine | secant | tangent | cotangent | cosecant

NOT: 0-978-0-547-04983-0

2. ANS:

Answers may vary. Sample answer $\tan \theta = \frac{\sqrt{3}}{3}$.



PTS: 1 DIF: Level B REF: HMPC0492 TOP: Objective 1

KEY: right | triangle | trigonometry | sine | cosine | tangent

NOT: 0-978-0-547-04983-0

3. ANS:

$$\sin t = \frac{\sqrt{2}}{2}, \csc t = \sqrt{2}$$

$$\cos t = \frac{\sqrt{2}}{2}, \sec t = \sqrt{2}$$

$$\tan t = 1, \cot t = 1$$

PTS: 1 DIF: Level B REF: HMPC0624 TOP: Objective 2

KEY: function | trigonometry | sine | cosine | secant | tangent | cotangent | cosecant | sin | cos | cot | tan | unit circle

NOT: 0-978-0-547-04983-0

4. ANS:

$$\sin t = -\frac{1}{2}, \csc t = -2$$

$$\cos t = -\frac{\sqrt{3}}{2}, \sec t = -\frac{2\sqrt{3}}{3}$$

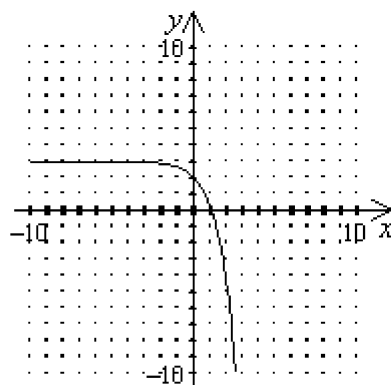
$$\tan t = \frac{\sqrt{3}}{3}, \cot t = \sqrt{3}$$

PTS: 1 DIF: Level B REF: HMPC0624 TOP: Objective 2

KEY: function | trigonometry | sine | cosine | secant | tangent | cotangent | cosecant | sin | cos | cot | tan | unit circle

NOT: 0-978-0-547-04983-0

5. ANS:



PTS: 1 DIF: Level B
KEY: graph | exponential | function

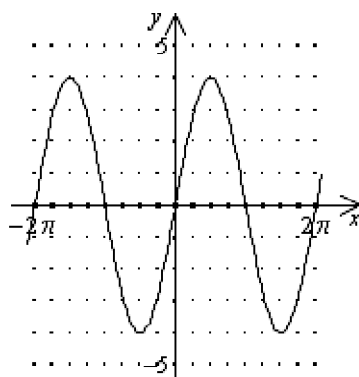
REF: HMAL0714 TOP: Objective 3
NOT: 0-978-0-547-04983-0

6. ANS:
0.824

PTS: 1 DIF: Level B
KEY: evaluate | exponent | decimal

REF: HMAL0171 TOP: Objective 3
NOT: 0-978-0-547-04983-0

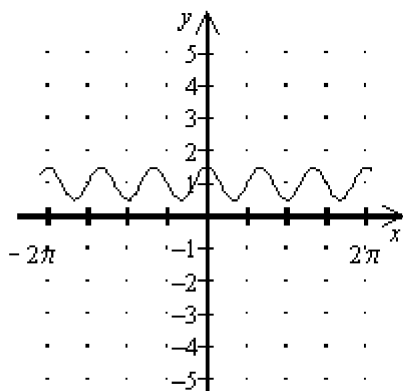
7. ANS:



PTS: 1 DIF: Level B
KEY: graph | trigonometry | sine | cosine

REF: HMPC0439 TOP: Objective 1
NOT: 0-978-0-547-04983-0

8. ANS:



PTS: 1 DIF: Level B REF: HMPC0481 TOP: Objective 3
 KEY: graph | vertical | trigonometry | sine | cosine | horizontal | translation | shift
 NOT: 0-978-0-547-04983-0

9. ANS:

$$\ln \frac{1}{4} \approx -1.386$$

PTS: 1 DIF: Level B REF: HMAL0747 TOP: Objective 1
 KEY: exponent | natural log | base e NOT: 0-978-0-547-04983-0

10. ANS:

0.001

PTS: 1 DIF: Level B REF: HMAL0748 TOP: Objective 1
 KEY: solve | equation | log NOT: 0-978-0-547-04983-0

11. ANS:

$$\log_3 \frac{(x+6)^4 (x+4)^7}{\sqrt{x}}$$

PTS: 1 DIF: Level B REF: HMAL0741 TOP: Objective 3
 KEY: log | properties NOT: 0-978-0-547-04983-0

12. ANS:

$$\log_a 4 + \log_a x + 4 \log_a y - 3 \log_a z$$

PTS: 1 DIF: Level B REF: HMAL0739 TOP: Objective 3
 KEY: log | properties NOT: 0-978-0-547-04983-0

13. ANS:

$$-\sin 7^\circ$$

PTS: 1 DIF: Level B REF: HMPC0645 TOP: Objective 2
 KEY: trigonometry | sine | cosine | reference angle NOT: 0-978-0-547-04983-0

14. ANS:

Answers will vary.

PTS: 1

DIF: Level B

REF: HMPC0618 TOP: Objective 1

KEY: trigonometric | identity

NOT: 0-978-0-547-04983-0

15. ANS:

Answers will vary.

PTS: 1

DIF: Level B

REF: HMPC0617 TOP: Objective 1

KEY: trigonometric | identity

NOT: 0-978-0-547-04983-0

16. ANS:

fuck yeah

PTS: 1