

Math 30-1: Trigonometry Two

PRACTICE EXAM

1. The general solution of $\tan\theta = 0$ is:

A. $\theta = \frac{\pi}{4} + n\pi, n \in \mathbb{I}$

B. $\theta = \frac{\pi}{4} + n\left(\frac{\pi}{2}\right), n \in \mathbb{I}$

C. $\theta = \frac{\pi}{2} + n\pi, n \in \mathbb{I}$

D. $\theta = n\pi, n \in \mathbb{I}$

2. Over the domain $0 \leq \theta \leq 2\pi$, the equation $\cos\theta = 2$ has:

A. Solutions at $\theta = \frac{\pi}{3}, \frac{5\pi}{3}$.

B. Solutions at $\theta = \frac{2\pi}{3}, \frac{4\pi}{3}$.

C. Solutions at $(0, 2)$, $(\pi, 2)$, and $(2\pi, 2)$.

D. No solution. The graph of $y = \cos\theta$ and the graph of $y = 2$ have no point of intersection.

3. The general solution of $\cos\theta = -\frac{\sqrt{3}}{2}$ is:

A. $\theta = 30^\circ + n(360^\circ)$ and $\theta = 150^\circ + n(360^\circ), n \in \mathbb{I}$

B. $\theta = 150^\circ + n(360^\circ)$ and $\theta = 210^\circ + n(360^\circ), n \in \mathbb{I}$

C. $\theta = 150^\circ + n(360^\circ)$ and $\theta = 330^\circ + n(360^\circ), n \in \mathbb{I}$

D. $\theta = 150^\circ + n(180^\circ), n \in \mathbb{I}$

4. Over the domain $0 \leq \theta \leq 2\pi$, the equation $\cos\theta = \frac{1}{2}$ has:

A. No solution.

B. Solutions at the θ -intercepts of $y = 2\cos\theta - 1$.

C. The solutions $\theta = \frac{\pi}{6}, \frac{5\pi}{6}$.

D. The solutions $\theta = \frac{2\pi}{3}, \frac{5\pi}{3}$.

5. Which of the following techniques **cannot** be used to solve $\sin\theta = -0.30$?
- Solving with the \sin^{-1} feature of a calculator.
 - Finding angles on the unit circle.
 - Finding point(s) of intersection.
 - Finding θ -intercepts.
6. The general solution of $\sec\theta = -2$ is:
- $\theta = \frac{5\pi}{6} + n(2\pi)$ and $\theta = \frac{7\pi}{6} + n(2\pi)$, $n \in \mathbb{I}$
 - $\theta = \frac{\pi}{3} + n(2\pi)$ and $\theta = \frac{2\pi}{3} + n(2\pi)$, $n \in \mathbb{I}$
 - $\theta = \frac{2\pi}{3} + n(2\pi)$ and $\theta = \frac{4\pi}{3} + n(2\pi)$, $n \in \mathbb{I}$
 - No solution.
7. $\csc\theta$ is undefined at:
- $\theta = \frac{\pi}{4} + n\left(\frac{\pi}{2}\right)$, $n \in \mathbb{I}$
 - $\theta = \frac{\pi}{2} + n\pi$, $n \in \mathbb{I}$
 - $\theta = n\pi$, $n \in \mathbb{I}$
 - $\theta = n(2\pi)$, $n \in \mathbb{I}$
8. Over the domain $0^\circ \leq \theta \leq 360^\circ$, the equation $\sec\theta = -2.3662$ has solutions of:
- $\theta = 115^\circ, 245^\circ$
 - $\theta = 120^\circ, 240^\circ$
 - $\theta = 125^\circ, 235^\circ$
 - $\theta = 130^\circ, 230^\circ$

9. Over the domain $0 \leq \theta \leq 2\pi$, the equation $2\sin\theta\cos\theta = \cos\theta$ has solutions of:

A. $\theta = \frac{\pi}{6}, \frac{5\pi}{6}$

B. $\theta = \frac{\pi}{3}, \frac{2\pi}{3}$

C. $\theta = \frac{\pi}{6}, \frac{\pi}{2}, \frac{5\pi}{6}, \frac{3\pi}{2}$

D. $\theta = \frac{\pi}{3}, \frac{\pi}{2}, \frac{2\pi}{3}, \frac{3\pi}{2}$

10. Over the domain $0 \leq \theta \leq 2\pi$, the equation $2\cos^2\theta = \cos\theta$ has solutions of:

A. $\theta = \frac{\pi}{3}, \frac{\pi}{2}, \frac{3\pi}{2}, \frac{5\pi}{3}$

B. $\theta = \frac{\pi}{3}, \frac{5\pi}{3}$

C. $\theta = \frac{2\pi}{3}, \frac{4\pi}{3}$

D. $\theta = 0, \pi, 2\pi$

11. Over the domain $0 \leq \theta \leq 2\pi$, the equation $\tan^4\theta - \tan^2\theta = 0$ has solutions of:

A. $\theta = \frac{\pi}{2}, \frac{3\pi}{2}$

B. $\theta = 0, \pi, 2\pi$

C. $\theta = \frac{\pi}{4}, \frac{3\pi}{4}, \frac{5\pi}{4}, \frac{7\pi}{4}$

D. $\theta = 0, \frac{\pi}{4}, \frac{3\pi}{4}, \pi, \frac{5\pi}{4}, \frac{7\pi}{4}, 2\pi$

12. Over the domain $0 \leq \theta \leq 2\pi$, the equation $2\sin^2\theta - \sin\theta - 1 = 0$ has solutions of:

A. $\theta = 0, \pi, 2\pi$

B. $\theta = \frac{\pi}{6}, \frac{5\pi}{6}$

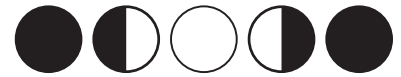
C. $\theta = \frac{\pi}{2}, \frac{7\pi}{6}, \frac{11\pi}{6}$

D. $\theta = \frac{\pi}{4}, \frac{5\pi}{4}, \frac{4\pi}{3}, \frac{5\pi}{3}$

13. Over the domain $0 \leq \theta \leq 2\pi$, the equation $\csc^2\theta - 3\csc\theta + 2 = 0$ has solutions of:
- A. $\theta = \pi$
- B. $\theta = \frac{\pi}{6}, \frac{\pi}{2}, \frac{5\pi}{6}$
- C. $\theta = \frac{\pi}{3}, \frac{2\pi}{3}$
- D. $\theta = 0, \frac{\pi}{4}, \frac{\pi}{2}, \frac{3\pi}{4}, \pi$
14. Over the domain $0 \leq \theta \leq 2\pi$, the equation $2\sin^3\theta - 5\sin^2\theta + 2\sin\theta = 0$ has solutions of:
- A. $\theta = \frac{\pi}{6}, \frac{5\pi}{6}$
- B. $\theta = 0, \pi, 2\pi$
- C. $\theta = 0, \frac{\pi}{6}, \frac{5\pi}{6}, \pi, 2\pi$
- D. $\theta = \frac{\pi}{6}, \frac{\pi}{2}, \frac{5\pi}{6}, \frac{3\pi}{2}$
15. Over the domain $0 \leq \theta \leq 2\pi$, the equation $\sin 2\theta = -\frac{\sqrt{3}}{2}$ has solutions of:
- A. $\theta = \frac{2\pi}{3}, \frac{4\pi}{3}$
- B. $\theta = \frac{4\pi}{3}, \frac{5\pi}{3}$
- C. $\theta = \frac{2\pi}{3}, \frac{5\pi}{6}, \frac{5\pi}{3}, \frac{11\pi}{6}$
- D. $\theta = \frac{7\pi}{6}, \frac{4\pi}{3}, \frac{5\pi}{3}, \frac{11\pi}{6}$
16. Over the domain $0 \leq \theta \leq 8\pi$, the equation $\sin\frac{1}{4}\theta = -1$ has a solution of:
- A. $\theta = \frac{3\pi}{2}$
- B. $\theta = \frac{3\pi}{8}$
- C. $\theta = 4\pi$
- D. $\theta = 6\pi$

17. It takes the moon approximately 28 days to go through all of its phases.

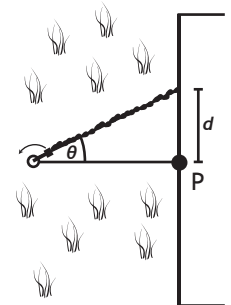
On day zero, the visibility ratio is 0 (0%).
 On day 14, the visibility ratio is 1 (100%).
 On day 28, the visibility ratio is 0 (0%).



The days on which the visibility ratio of the moon's surface is 0.60 (60%) can be found by solving the trigonometric equation:

- A. $0.40 = -0.50\cos\left(\frac{\pi}{14}t\right) + 0.50$
 B. $0.60 = -0.50\cos\left(\frac{\pi}{14}t\right) + 0.50$
 C. $0.60 = 0.50\cos\left(\frac{\pi}{14}t\right) + 0.50$
 D. $0.60 = \cos\left(\frac{\pi}{14}t\right)$

18. A rotating sprinkler is positioned 4 m away from the wall of a house. The wall is 8 m long. As the sprinkler rotates, the stream of water splashes the house d meters from point P.
Note: North of point P is a positive distance, and south of point P is a negative distance.



If the water splashes the wall 2 m north of point P, the angle of rotation can be found by finding the intersection point of the functions:

- A. $y = 4\tan\theta$ and $y = 2$, where $\theta \in \mathbb{R}$.
 B. $y = 4\tan\theta$ and $y = 2$, where $0 \leq \theta \leq \frac{\pi}{4}$.
 C. $y = 8\tan\theta$ and $y = 2$, where $\theta \in \mathbb{R}$.
 D. $y = 8\tan\theta$ and $y = 2$, where $0 \leq \theta \leq \frac{\pi}{4}$.

19. Which trigonometric equation can be classified as a trigonometric identity?
- A. $\sin x = -\frac{1}{2}$
 - B. $\tan x = 1$
 - C. $\csc x = \frac{1}{\sin x}$
 - D. $\sec x = \text{undefined}$
20. The expression $\cot x \sin x \sec x$ is equivalent to:
- A. 1, with no domain restrictions.
 - B. 1, with the domain restriction $x \neq \frac{n\pi}{2}$.
 - C. $\sin x$, with no domain restrictions.
 - D. $\cos x$, with the domain restriction $x \neq n\pi$.
21. The expression $\frac{\sin x \sec x}{\cot x}$ is equivalent to:
- A. 1, with no domain restrictions.
 - B. $\tan x$, with the domain restriction $x \neq \frac{n\pi}{2}$.
 - C. $\tan^2 x$, with the domain restriction $x \neq \frac{n\pi}{2}$.
 - D. $\tan^2 x$, with the domain restriction $x \neq n\pi$.
22. The expression $\cos x - \cos^3 x$ is equivalent to:
- A. $\sin^3 x$, with no domain restrictions.
 - B. $\cos^2 x$, with no domain restrictions.
 - C. $\cos x \sin^2 x$, with no domain restrictions.
 - D. $\cos^2 x \sin^2 x$, with no domain restrictions.

23. The expression $\frac{\sec^2 x - 1}{1 + \tan^2 x}$ is equivalent to:
- A. $\sin x$, with no domain restrictions.
 - B. $\sin^2 x$, with the domain restriction $x \neq n\pi$.
 - C. $\sin^2 x$, with the domain restriction $x \neq \frac{n\pi}{2}$.
 - D. $\sin^2 x$, with the domain restriction $x \neq \frac{\pi}{2} + n\pi$.
24. The expression $\frac{\sin^2 x}{1 - \cos x}$ is equivalent to:
- A. $1 + \cos x$, with the domain restriction $x \neq n(2\pi)$.
 - B. $1 + \cos x$, with the domain restriction $x \neq \frac{\pi}{2} + n\pi$.
 - C. $1 - \cos x$, with the domain restriction $x \neq n(2\pi)$.
 - D. $1 - \cos x$, with the domain restriction $x \neq \frac{\pi}{2} + n\pi$.
25. The expression $1 + \sec x$ is equivalent to:
- A. $\frac{\cos x + 1}{\cos x}$, with the domain restriction $x \neq \frac{\pi}{2} + n\pi$.
 - B. $\frac{\cos x + 1}{\cos x}$, with the domain restriction $x \neq \frac{n\pi}{2}$.
 - C. $\frac{\sin x + 1}{\sin x}$, with the domain restriction $x \neq \frac{\pi}{2} + n\pi$.
 - D. $\frac{\sin x + 1}{\sin x}$, with the domain restriction $x \neq \frac{n\pi}{2}$.
26. The expression $\cot x + \tan x$ is equivalent to:
- A. $\sec x \csc x$, with the domain restriction $x \neq \frac{\pi}{2} + n\pi$.
 - B. $\sec x \csc x$, with the domain restriction $x \neq \frac{n\pi}{2}$.
 - C. $\cos x \sin x$, with the domain restriction $x \neq \frac{\pi}{2} + n\pi$.
 - D. $\cos x \sin x$, with the domain restriction $x \neq \frac{n\pi}{2}$.

27. The expression $\frac{\cos x}{1 + \sin x} + \frac{\cos x}{1 - \sin x}$ is equivalent to:

- A. $2 \cos x$, with the domain restriction $x \neq \frac{\pi}{2} + n\pi$.
- B. $2 \sin x$, with the domain restriction $x \neq \frac{\pi}{2} + n\pi$.
- C. $2 \sec x$, with the domain restriction $x \neq \frac{\pi}{2} + n\pi$.
- D. $2 \csc x$, with the domain restriction $x \neq \frac{\pi}{2} + n\pi$.

28. The expression $\frac{\cos x}{1 - \sin x}$ is equivalent to:

- A. $\frac{1 + \sin x}{\cos x}$, with the domain restriction $x \neq \frac{\pi}{2} + n\pi$.
- B. $\frac{1 + \sin x}{\cos x}$, with the domain restriction $x \neq n\pi$.
- C. $\frac{1 - \sin x}{\cos x}$, with the domain restriction $x \neq \frac{\pi}{2} + n\pi$.
- D. $\frac{1 - \sin x}{\cos x}$, with the domain restriction $x \neq n\pi$.

29. The expression $\sin^4 x - \cos^4 x$ is equivalent to:

- A. $2 \sin^2 x - 1$, with no domain restrictions.
- B. $1 - 2 \sin^2 x$, with no domain restrictions.
- C. $2 \cos^2 x - 1$, with no domain restrictions.
- D. $1 - 2 \cos^2 x$, with no domain restrictions.

30. The expression $\frac{1}{5} \sin^2 x + \frac{1}{5} \cos^2 x$ is equivalent to:

- A. $\frac{1}{25}$, with no domain restrictions.
- B. $\frac{1}{5}$, with no domain restrictions.
- C. $\frac{2}{5}$, with no domain restrictions.
- D. 5 , with no domain restrictions.

31. The false statement regarding $\sin x = \tan x \cos x$ is:

- A. The left side and right side are equal algebraically.
- B. The left side and right side are equal when $x = \frac{\pi}{3}$.
- C. The left side and right side have the same non-permissible values.
- D. The graph of $y = \sin x$ is continuous but the graph of $y = \tan x \cos x$ has holes.

32. Over the domain $0 \leq \theta \leq 2\pi$, the equation $2\sin^2 x - \cos x - 1 = 0$ has solutions of:

- A. $x = \frac{\pi}{6}, \frac{5\pi}{6}$
- B. $x = \frac{\pi}{3}, \pi, \frac{5\pi}{3}$
- C. $x = \frac{\pi}{3}, \frac{\pi}{2}, \frac{2\pi}{3}$
- D. $x = \frac{4\pi}{3}, \pi, \frac{5\pi}{3}$

33. Over the domain $0 \leq \theta \leq 2\pi$, the equation $3 - 3\csc x + \cot^2 x = 0$ has solutions of:

- A. $x = \frac{\pi}{6}, \frac{\pi}{2}, \frac{5\pi}{6}$
- B. $x = \frac{7\pi}{6}, \frac{3\pi}{2}, \frac{11\pi}{6}$
- C. $x = \frac{\pi}{3}, \frac{\pi}{2}, \frac{5\pi}{3}$
- D. $x = \frac{4\pi}{3}, \frac{3\pi}{2}, \frac{5\pi}{3}$

34. Over the domain $0 \leq \theta \leq 2\pi$, the equation $2\sec^2 x - \tan^4 x = -1$ has solutions of:

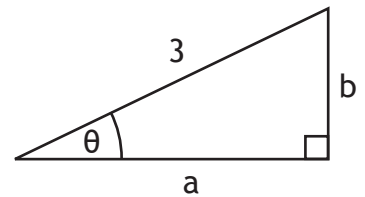
- A. $x = \frac{4\pi}{3}, \frac{5\pi}{3}$
- B. $x = \frac{7\pi}{6}, \frac{11\pi}{6}$
- C. $x = \frac{\pi}{6}, \frac{\pi}{3}, \frac{2\pi}{3}, \frac{5\pi}{6}$
- D. $x = \frac{\pi}{3}, \frac{2\pi}{3}, \frac{4\pi}{3}, \frac{5\pi}{3}$

35. If the value of $\sin x = \frac{4}{7}$, $0 \leq x \leq \frac{\pi}{2}$, the value of $\cos x$ within the same domain is:

- A. $\cos x = -\frac{1}{2}$
- B. $\cos x = -\frac{4}{7}$
- C. $\cos x = \frac{7}{4}$
- D. $\cos x = \frac{\sqrt{33}}{7}$

36. Using the triangle to the right, the expression $\frac{\sqrt{9-b^2}}{b^2}$ can be rewritten as:

- A. $\frac{\cos\theta}{3\sin^2\theta}$
- B. $\frac{\sin\theta}{3\cos^2\theta}$
- C. $\frac{3\cos^2\theta}{\sin\theta}$
- D. $\frac{3\sin^2\theta}{\cos\theta}$



$$b = 3\sin\theta$$

37. The exact value of $\sin\left(\frac{\pi}{2} - \frac{\pi}{6}\right)$ is:

- A. $\frac{1}{2}$
- B. $\frac{\sqrt{3}}{2}$
- C. $\frac{1+\sqrt{3}}{2}$
- D. $\frac{1-\sqrt{3}}{2}$

38. A trigonometric expression equivalent to $\frac{\tan \frac{\pi}{4} - \tan \frac{\pi}{6}}{1 + \tan \frac{\pi}{4} \tan \frac{\pi}{6}}$ is:

A. $\tan\left(\frac{\pi}{12}\right)$

B. $\tan\left(\frac{\pi}{6}\right)$

C. $\tan\left(\frac{\pi}{3}\right)$

D. $\tan\left(-\frac{\pi}{3}\right)$

39. The exact value of $\sin\left(\frac{5\pi}{12}\right)$ is:

A. $\frac{\sqrt{6} + \sqrt{2}}{4}$

B. $\frac{\sqrt{6} - \sqrt{2}}{4}$

C. $\frac{\sqrt{6}}{2}$

D. $\sqrt{3}$

40. $\sin x$ is equivalent to the expression:

A. $1 - 2\sin^2\left(\frac{1}{4}x\right)$

B. $\cos^2 x - \sin^2 x$

C. $2\sin\left(\frac{1}{2}x\right)\cos\left(\frac{1}{2}x\right)$

D. $-\cos x$

41. The expression $\cos 2x + 2\sin^2 x$ is equivalent to:

- A. 1
- B. $\sin x$
- C. $\cos^2 x$
- D. $\frac{1}{2}\tan 2x$

42. The expression $\cos^4 x - \sin^4 x$ is equivalent to:

- A. $\sin^2 x$
- B. $\cos^2 x$
- C. $\cos 2x$
- D. $\sin 2x$

43. The expression $\sin 3x$ is equivalent to:

- A. $\sin^2(2x)$
- B. $\sin(2x)\cos x$
- C. $\sin(2x)\sin x$
- D. $3\sin x - 4\sin^3 x$

44. The expression $\cos 34^\circ \cos 41^\circ - \sin 34^\circ \sin 41^\circ$ is equivalent to:

- A. $\frac{\sqrt{6} - \sqrt{2}}{4}$
- B. $\frac{\sqrt{6} + \sqrt{2}}{4}$
- C. $\sqrt{2}$
- D. $\sqrt{3}$

45. Over the domain $0 \leq \theta \leq 2\pi$, the equation $\cos 2x = \cos^2 x$ has solutions of:

A. $x = \frac{\pi}{6}, \frac{5\pi}{6}$

B. $x = \frac{\pi}{4}, \frac{3\pi}{4}, \frac{5\pi}{4}, \frac{7\pi}{4}$

C. $x = \frac{\pi}{2}, \frac{3\pi}{2}$

D. $x = 0, \pi, 2\pi$

46. Over the domain $0 \leq \theta \leq 2\pi$, the equation $\sin x \cos x = \frac{1}{4}$ has solutions of:

A. $x = \frac{\pi}{12}, \frac{5\pi}{12}$

B. $x = \frac{\pi}{12}, \frac{5\pi}{12}, \frac{13\pi}{12}, \frac{17\pi}{12}$

C. $x = \frac{\pi}{2}, \frac{3\pi}{2}$

D. $x = \frac{\pi}{3}, \frac{2\pi}{3}, \frac{4\pi}{3}, \frac{5\pi}{3}$

47. Over the domain $0 \leq \theta \leq 2\pi$, the equation $\cos 2x - \cos x = 0$ has solutions of:

A. $x = 0, \frac{2\pi}{3}, \frac{4\pi}{3}, 2\pi$

B. $x = 0, \frac{4\pi}{3}, \frac{5\pi}{3}, 2\pi$

C. $x = \frac{\pi}{2}, \frac{3\pi}{4}, \frac{5\pi}{4}$

D. $x = \frac{\pi}{4}, \frac{\pi}{2}, \frac{3\pi}{4}, \frac{5\pi}{4}, \frac{3\pi}{2}, \frac{7\pi}{4}$

48. Over the domain $0 \leq \theta \leq 2\pi$, the equation $\cos(x + \pi) - \cos^2 x = 0$ has solutions of:

A. $x = 0, \pi, 2\pi$

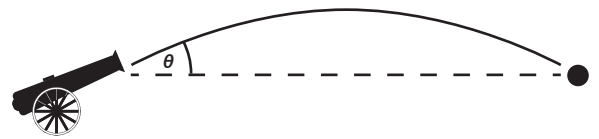
B. $x = \frac{\pi}{4}, \frac{\pi}{2}, \frac{3\pi}{4}$

C. $x = \frac{\pi}{2}, \pi, \frac{3\pi}{2}$

D. $x = \frac{5\pi}{4}$

49. If a cannon shoots a cannonball θ degrees above the horizontal, the horizontal distance traveled by the cannonball before it hits the ground can be found with the function:

$$d(\theta) = \frac{v_i^2 \sin \theta \cos \theta}{4.9}$$

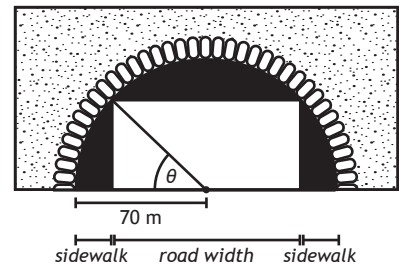


If the initial velocity of the cannonball is 36 m/s, the function can be rewritten as:

- A. $d(\theta) = \frac{36}{4.9} \sin 2\theta$
- B. $d(\theta) = \frac{36}{9.8} \cos 2\theta$
- C. $d(\theta) = \frac{1296}{9.8} \sin 2\theta$
- D. $d(\theta) = \frac{1296}{9.8} \cos 2\theta$
50. An engineer is planning the construction of a road through a tunnel. In one possible design, the width of the road maximizes the area of a rectangle inscribed within the cross-section of the tunnel.

The angle of elevation from the centre line of the road to the upper corner of the rectangle is θ . Sidewalks on either side of the road are included in the design. The area of the rectangle is:

$$A(\theta) = 4900 \sin(2\theta)$$



The angle that maximizes the area of the rectangle and the corresponding road width are:

- A. Angle = 30° ; Road Width = $35\sqrt{3}$ m.
- B. Angle = 30° ; Road Width = $70\sqrt{3}$ m.
- C. Angle = 45° ; Road Width = $35\sqrt{2}$ m.
- D. Angle = 45° ; Road Width = $70\sqrt{2}$ m.

Trigonometry Two Practice Exam - ANSWER KEY

Video solutions are in italics.

1. **D** *Trigonometric Equations, Example 1c*
2. **D** *Trigonometric Equations, Example 2d*
3. **B** *Trigonometric Equations, Example 3b*
4. **B** *Trigonometric Equations, Example 4b*
5. **B** *Trigonometric Equations, Example 6*
6. **C** *Trigonometric Equations, Example 7a*
7. **C** *Trigonometric Equations, Example 8b*
8. **A** *Trigonometric Equations, Example 12*
9. **C** *Trigonometric Equations, Example 14a*
10. **A** *Trigonometric Equations, Example 15c*
11. **D** *Trigonometric Equations, Example 15d*
12. **C** *Trigonometric Equations, Example 16a*
13. **B** *Trigonometric Equations, Example 16b*
14. **C** *Trigonometric Equations, Example 16c*
15. **C** *Trigonometric Equations, Example 17a*
16. **D** *Trigonometric Equations, Example 18b*
17. **B** *Trigonometric Equations, Example 19*
18. **B** *Trigonometric Equations, Example 20*
19. **C** *Trigonometric Identities I, Example 1b*
20. **B** *Trigonometric Identities I, Example 3b*
21. **C** *Trigonometric Identities I, Example 4a*
22. **C** *Trigonometric Identities I, Example 5b*
23. **D** *Trigonometric Identities I, Example 6b*
24. **A** *Trigonometric Identities I, Example 6c*
25. **A** *Trigonometric Identities I, Example 7a*
26. **B** *Trigonometric Identities I, Example 7c*
27. **C** *Trigonometric Identities I, Example 8c*
28. **A** *Trigonometric Identities I, Example 8d*
29. **A** *Trigonometric Identities I, Example 9b*
30. **B** *Trigonometric Identities I, Example 10c*
31. **C** *Trigonometric Identities I, Example 12*
32. **B** *Trigonometric Identities I, Example 15a*
33. **A** *Trigonometric Identities I, Example 16a*
34. **D** *Trigonometric Identities I, Example 17a*
35. **D** *Trigonometric Identities I, Example 18a*
36. **A** *Trigonometric Identities I, Example 19a*
37. **B** *Trigonometric Identities II, Example 1b*
38. **A** *Trigonometric Identities II, Example 2b*
39. **A** *Trigonometric Identities II, Example 3b*
40. **C** *Trigonometric Identities II, Example 6b (iii)*
41. **A** *Trigonometric Identities II, Example 9a*
42. **C** *Trigonometric Identities II, Example 10a*
43. **D** *Trigonometric Identities II, Example 12d*
44. **A** *Trigonometric Identities II, Example 13c*
45. **D** *Trigonometric Identities II, Example 14a*
46. **B** *Trigonometric Identities II, Example 15d*
47. **A** *Trigonometric Identities II, Example 16a*
48. **C** *Trigonometric Identities II, Example 17d*
49. **C** *Trigonometric Identities II, Example 20a*
50. **D** *Trigonometric Identities II, Example 21 (b, c)*

Math 30-1 Practice Exam: Tips for Students

- Every question in the practice exam has already been covered in the Math 30-1 workbook. It is recommended that students refrain from looking at the practice exam until they have completed their studies for the unit.
- Do not guess on a practice exam. The practice exam is a self-diagnostic tool that can be used to identify knowledge gaps. Leave the answer blank and study the solution later.