

**A2.A.56: Determining Trigonometric Functions 1: Know the exact and approximate values of the sine, cosine, and tangent of  $0^\circ$ ,  $30^\circ$ ,  $45^\circ$ ,  $60^\circ$ ,  $90^\circ$ ,  $180^\circ$ , and  $270^\circ$  angles**

1 Which is equal in value to  $\sin 180^\circ$ ?

- 1)  $\tan 45^\circ$
- 2)  $\cos 90^\circ$
- 3)  $\cos 0^\circ$
- 4)  $\tan 90^\circ$

2 The value of  $(\sin 60^\circ)(\cos 60^\circ)$  is

- 1)  $\frac{3}{4}$
- 2)  $\frac{\sqrt{2}}{4}$
- 3)  $\frac{\sqrt{3}}{3}$
- 4)  $\frac{\sqrt{3}}{4}$

3 Which is the value of  $\cos(-240^\circ)$ ?

- 1)  $-\frac{1}{2}$
- 2)  $\frac{3}{2}$
- 3)  $\frac{1}{2}$
- 4)  $-\frac{3}{2}$

4 What is the value of  $\sin(-240^\circ)$ ?

- 1)  $\frac{1}{2}$
- 2)  $-\frac{1}{2}$
- 3)  $\frac{\sqrt{3}}{2}$
- 4)  $-\frac{\sqrt{3}}{2}$

5 What is the value of  $\cos(-120^\circ)$ ?

- 1)  $\frac{1}{2}$
- 2)  $-\frac{1}{2}$
- 3)  $\frac{\sqrt{3}}{2}$
- 4)  $-\frac{\sqrt{3}}{2}$

6 Find the value of  $\sin 135^\circ$  in radical form.

7 Find the value of  $\tan 120^\circ$ .

8 Find the value of  $\tan(-135^\circ)$ .

**A2.A.56: Determining Trigonometric Functions 1: Know the exact and approximate values of the sine, cosine, and tangent of  $0^\circ$ ,  $30^\circ$ ,  $45^\circ$ ,  $60^\circ$ ,  $90^\circ$ ,  $180^\circ$ , and  $270^\circ$  angles****Answer Section**

1 ANS: 2                    PTS: 2                    REF: 069021siii

2 ANS: 4                    PTS: 1                    REF: 089017siii

3 ANS: 1                    PTS: 2                    REF: 088527siii

4 ANS: 3                    PTS: 2                    REF: 019027siii

5 ANS: 2                    PTS: 2                    REF: 069434siii

6 ANS:

$$\frac{1}{\sqrt{2}}$$

PTS: 2                    REF: 089806siii

7 ANS:

$$-\sqrt{3}$$

PTS: 2                    REF: 018517siii

8 ANS:

1

PTS: 2                    REF: 068709siii