

**A2.A.56: Determining Trigonometric Functions 3: 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 The value of  $\sin \frac{7\pi}{6}$  is

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

4 The value of  $\sin \frac{4\pi}{3}$  is

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

2 If  $f(x) = 4\cos 3x$ , what is the value of  $f\left(\frac{\pi}{4}\right)$ ?

- 1)  $-\sqrt{2}$
- 2)  $-2\sqrt{2}$
- 3) 135
- 4) 4

5 Find the value of  $\cos \frac{5\pi}{3}$ .6 If  $f(x) = \sin x + \cos x$ , evaluate  $f(2\pi)$ .3 The value of  $\sin \frac{3\pi}{2} + \cos \frac{2\pi}{3}$  is

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

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1 ANS: 2 PTS: 2 REF: 018732siii

2 ANS: 2 PTS: 2 REF: 089626siii

3 ANS: 3 PTS: 2 REF: 069819siii

4 ANS: 4 PTS: 2 REF: 060120siii

5 ANS:  
0.5

PTS: 2 REF: 068018siii

6 ANS:  
1

PTS: 2 REF: 089902siii