

**Math Xb—Spring 2004**  
**Sine, cosine, and tangent of standard angles**

1. The value of  $\tan(11\pi/6)$  is equal to:

- |                   |                        |
|-------------------|------------------------|
| (a) $\sqrt{3}$    | (d) $-\sqrt{3}$        |
| (b) $-1/\sqrt{3}$ | (e) None of the above. |
| (c) $1/\sqrt{3}$  |                        |

2. The value of  $\cos(5\pi/6)$  is equal to:

- |                   |                        |
|-------------------|------------------------|
| (a) $1/2$         | (d) $\sqrt{3}/2$       |
| (b) $-1/2$        | (e) None of the above. |
| (c) $-\sqrt{3}/2$ |                        |

3. The value of  $\tan(5\pi/6)$  is equal to:

- |                  |                        |
|------------------|------------------------|
| (a) $\sqrt{3}$   | (d) $-1/\sqrt{3}$      |
| (b) $1/\sqrt{3}$ | (e) None of the above. |
| (c) $-\sqrt{3}$  |                        |

4. The value of  $\sin(11\pi/4)$  is equal to:

- |                  |                        |
|------------------|------------------------|
| (a) $1/\sqrt{2}$ | (d) $-1/\sqrt{2}$      |
| (b) $\sqrt{2}$   | (e) None of the above. |
| (c) $-\sqrt{2}$  |                        |

5. The value of  $\tan(3\pi/2)$  is equal to:

- |        |                        |
|--------|------------------------|
| (a) 1  | (d) $-1/\sqrt{3}$      |
| (b) -1 | (e) None of the above. |
| (c) 0  |                        |

6. The value of  $\cos(-5\pi/3)$  is equal to:

- |                  |                        |
|------------------|------------------------|
| (a) $\sqrt{3}$   | (d) $-1/\sqrt{3}$      |
| (b) $-\sqrt{3}$  | (e) None of the above. |
| (c) $1/\sqrt{3}$ |                        |

7. The value of  $\sin(-7\pi/6)$  is equal to:

- |                  |                        |
|------------------|------------------------|
| (a) $1/2$        | (d) $/\sqrt{3}/2$      |
| (b) $-1/2$       | (e) None of the above. |
| (c) $\sqrt{3}/2$ |                        |

8. The value of  $\tan(-3\pi/4)$  is equal to:

- (a)  $\sqrt{3}$
- (b) 1
- (c)  $1/\sqrt{3}$

- (d) -1
- (e) None of the above.

9. The value of  $\cos(7\pi/4)$  is equal to:

- (a)  $\sqrt{2}$
- (b)  $-\sqrt{2}$
- (c)  $1/\sqrt{2}$

- (d)  $-1/\sqrt{2}$
- (e) None of the above.

10. The value of  $\sin(-11\pi/4)$  is equal to:

- (a)  $\sqrt{2}$
- (b)  $-\sqrt{2}$
- (c)  $1/\sqrt{2}$

- (d)  $-1/\sqrt{2}$
- (e) None of the above.

## Answers

1. b

3. d

5. e

7. a

9. c

2. c

4. a

6. e

8. b

10. d