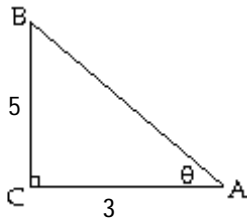


Use the Pythagorean Theorem to find the length of the missing side. Then find the indicated trigonometric function

1) Find  $\cos \theta$ .

1) \_\_\_\_\_



A)  $\frac{3\sqrt{34}}{34}$

B)  $\frac{5\sqrt{34}}{34}$

C)  $\frac{\sqrt{34}}{5}$

D)  $\frac{\sqrt{34}}{3}$

$\theta$  is an acute angle and  $\sin \theta$  and  $\cos \theta$  are given. Use identities to find the indicated value.

2)  $\sin \theta = \frac{2}{7}$ ,  $\cos \theta = \frac{3\sqrt{5}}{7}$ . Find  $\tan \theta$ .

2) \_\_\_\_\_

A)  $\frac{2\sqrt{5}}{2}$

B)  $\frac{7}{2}$

C)  $\frac{2\sqrt{5}}{15}$

D)  $\frac{7\sqrt{5}}{15}$

Use an identity to find the value of the expression. Do not use a calculator.

3)  $\sec^2 50^\circ - \tan^2 50^\circ$

3) \_\_\_\_\_

A) 1

B) 0.50

C) 0

D) 0.25

4)  $\cos 25^\circ \sec 25^\circ$

4) \_\_\_\_\_

A) 0

B)  $\cos^2 25^\circ$

C) 1

D) 25

Find a cofunction with the same value as the given expression.

5)  $\sin 20^\circ$

5) \_\_\_\_\_

A)  $\tan 70^\circ$

B)  $\cot 70^\circ$

C)  $\cos 20^\circ$

D)  $\cos 70^\circ$

6)  $\csc 53^\circ$

6) \_\_\_\_\_

A)  $\sec 37^\circ$

B)  $\sin 53^\circ$

C)  $\sec 143^\circ$

D)  $\sec 53^\circ$

7)  $\tan \frac{\pi}{17}$

7) \_\_\_\_\_

A)  $\tan \frac{15\pi}{34}$

B)  $\csc \frac{\pi}{17}$

C)  $\cot \frac{\pi}{17}$

D)  $\cot \frac{15\pi}{34}$

8) A surveyor is measuring the distance across a small lake. He has set up his transit on one side of the lake 130 feet from a piling that is directly across from a pier on the other side of the lake. From his transit, the angle between the piling and the pier is  $50^\circ$ . What is the distance between the piling and the pier to the nearest foot?

8) \_\_\_\_\_

A) 155 feet

B) 109 feet

C) 84 feet

D) 100 feet

Find the exact value of the expression. Do not use a calculator.

9)  $1 + \sin^2 85^\circ + \sin^2 5^\circ$

9) \_\_\_\_\_

A) 1

B) 2

C) -1

D) 0

Answer Key

Testname: PRACTICE02

- 1) A
- 2) C
- 3) A
- 4) C
- 5) D
- 6) A
- 7) D
- 8) A
- 9) B