Trigonometry Worksheet 9 - Answers

Use the addition and subtraction formulas and special reference triangles to solve the following problems.

1.
$$\sin(15^{\circ})$$

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

6.
$$\sin\left(\frac{\pi}{12}\right)$$

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

2.
$$\sin(75^{\circ})$$

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

7.
$$\cos\left(\frac{5\pi}{12}\right)$$

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

3.
$$\cos(15^{\circ})$$

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

8.
$$\cos(195^{\circ})$$

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

4.
$$\cos(75^{\circ})$$

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

9. Simplify
$$\sin(x-\pi)$$

$$-\sin(x)$$
.

5.
$$\tan(165^{\circ})$$

$$\sqrt{3}-2$$
.

10. Simplify
$$\cos\left(x-\frac{\pi}{2}\right)$$

$$\sin(x)$$
.

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