

Name _____

Date _____

**Angle Sum and Difference, Double Angle and Half Angle Formulas -
Guided Lesson Explanation:**

Explanation#1

We will inverse the sin, then

$$\sin^{-1} x = 2/5 = 0.41$$

$$0.41 \times 5 = 2.057$$

$$\cos(2.057) = -0.46$$

Answer is: -0.46

Explanation#2

According to the formula:

$$\sin 90^\circ \cos 30^\circ + \cos 90^\circ \sin 30^\circ = \sin (A+B)$$

$$\sin 90^\circ \cos 30^\circ + \cos 90^\circ \sin 30^\circ = \sin (90^\circ + 30^\circ)$$

$$\sin 90^\circ \cos 30^\circ + \cos 90^\circ \sin 30^\circ = \sin (120^\circ)$$

$$\sin 90^\circ \cos 30^\circ + \cos 90^\circ \sin 30^\circ = 0.8$$

Answer is: 0.8

Explanation#3

We will inverse the sin, then

$$\sin^{-1} x = 3/9 = .33$$

$$.33 \times 8 = 2.71$$

$$\cos(2.71) = -0.91$$

Answer is: -0.91

