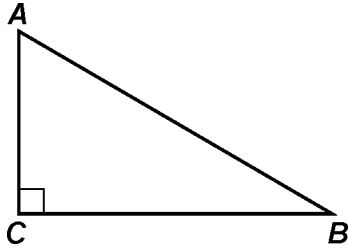


Name: _____

CC Geometry

Sine and Cosine of Complementary Angles

- 1) In scalene triangle ABC shown in the diagram below, $m\angle C = 90^\circ$.



Which equation is always true?

- A) $\sin A = \cos B$
 B) $\cos A = \sin C$
 C) $\sin A = \sin B$
 D) $\cos A = \cos B$
- 2) If $\cos(2x - 1)^\circ = \sin(3x + 6)^\circ$, then the value of x is
- A) 35 C) 17
 B) 71 D) -7
- 3) If $\cos(2x + 25)^\circ = \sin 35^\circ$, then x may equal
- A) 25 C) 20
 B) 10 D) 15

- 4) Find the degree measure of acute angle θ if $\cos 40^\circ = \sin \theta$. [Show all work.]

- 5) Find the $m\angle A$ in $\sin(2A + 15)^\circ = \cos A^\circ$ if $0^\circ < A < 90^\circ$. [Show all work.]

1) A 2) C 3) D

4) 50°

WORK SHOWN: $\theta + 40^\circ = 90^\circ$, $\theta = 50^\circ$

5) 25°

WORK SHOWN: $2A + 15 + A = 90^\circ$, $3A = 75^\circ$, $A = 25^\circ$