Name

1 Using:

$$\cos^2(\beta) = 1 - \sin^2(\beta)$$

$$0 < \beta < \frac{\pi}{2}$$

Solve for sine from cosine using trig identities

—

Solve:

$$\cos(\beta) = \frac{2}{4}$$

$$\sin(\beta) = ?$$

A	B
$\sin(\beta) = \frac{\sqrt{3}}{2}$	$\sin(\beta) = -\frac{\sqrt{3}}{2}$

2 Using:

$$\cos^2(\alpha) = 1 - \sin^2(\alpha)$$

$$\frac{3\pi}{2} < \alpha < 2\pi$$

Solve for sine from cosine using trig identities

—

Solve:

$$\cos(\alpha) = \frac{6}{7}$$

$$\sin(\alpha) = ?$$

A	B
$\sin(\alpha) = -\frac{2\sqrt{2}}{7}$	$\sin(\alpha) = -\frac{\sqrt{13}}{7}$

3 Using:

$$\cos^2(\beta) = 1 - \sin^2(\beta)$$

$$\frac{\pi}{2} < \beta < \pi$$

Solve for sine from cosine using trig identities

—

Solve:

$$\cos(\beta) = -\frac{4}{8}$$

$$\sin(\beta) = ?$$

A	B
$\sin(\beta) = \frac{\sqrt{3}}{3}$	$\sin(\beta) = \frac{\sqrt{3}}{2}$

4 Using:

$$\cos^2(\gamma) = 1 - \sin^2(\gamma)$$

$$\frac{\pi}{2} < \gamma < \pi$$

Solve for sine from cosine using trig identities

—

Solve:

$$\cos(\gamma) = -\frac{2}{7}$$

$$\sin(\gamma) = ?$$

A	B
$\sin(\gamma) = \frac{3\sqrt{5}}{7}$	$\sin(\gamma) = -\frac{3\sqrt{5}}{7}$

5 Using:

$$\cos^2(\alpha) = 1 - \sin^2(\alpha)$$

$$\frac{3\pi}{2} < \alpha < 2\pi$$

Solve for sine from cosine using trig identities

—

Solve:

$$\cos(\alpha) = \frac{3}{9}$$

$$\sin(\alpha) = ?$$

A	B
$\sin(\alpha) = \frac{2\sqrt{2}}{3}$	$\sin(\alpha) = -\frac{2\sqrt{2}}{3}$

6 Using:

$$\cos^2(\beta) = 1 - \sin^2(\beta)$$

$$\frac{\pi}{2} < \beta < \pi$$

Solve for sine from cosine using trig identities

—

Solve:

$$\cos(\beta) = -\frac{8}{9}$$

$$\sin(\beta) = ?$$

A	B
$\sin(\beta) = -\frac{\sqrt{17}}{9}$	$\sin(\beta) = \frac{\sqrt{17}}{9}$

7 Using:

$$\cos^2(\alpha) = 1 - \sin^2(\alpha)$$

$$0 < \alpha < \frac{\pi}{2}$$

Solve for sine from cosine using trig identities

—

Solve:

$$\cos(\alpha) = \frac{7}{9}$$

$$\sin(\alpha) = ?$$

A	B
$\sin(\alpha) = -\frac{4\sqrt{2}}{9}$	$\sin(\alpha) = \frac{4\sqrt{2}}{9}$

8 Using:

$$\cos^2(\beta) = 1 - \sin^2(\beta)$$

$$\pi < \beta < \frac{3\pi}{2}$$

Solve for sine from cosine using trig identities

—

Solve:

$$\cos(\beta) = -\frac{7}{9}$$

$$\sin(\beta) = ?$$

A	B
$\sin(\beta) = -\frac{\sqrt{11}}{9}$	$\sin(\beta) = -\frac{4\sqrt{2}}{9}$