Name _____

1 Using:
$$\sin^2(\gamma) = 1 - \cos^2(\gamma)$$
$$\tan(\gamma) \rightarrow \text{positive}$$

Solve for cosine from sine using trig identities

—

Solve:
$$\sin(\gamma) = -\frac{1}{9}$$
$$\cos(\gamma) = ?$$

A	B
$\cos(\gamma) = -\frac{4\sqrt{5}}{9}$	$\cos(\gamma) = -\frac{2\sqrt{15}}{9}$

2 Using:
$$\sin^2(\gamma) = 1 - \cos^2(\gamma)$$
$$\tan(\gamma) \rightarrow \text{positive}$$

Solve for cosine from sine using trig identities

—

Solve:
$$\sin(\gamma) = -\frac{3}{4}$$
$$\cos(\gamma) = ?$$

A	B
$\cos(\gamma) = -\frac{\sqrt{5}}{4}$	$\cos(\gamma) = -\frac{\sqrt{7}}{4}$

3 Using:
$$\sin^2(\gamma) = 1 - \cos^2(\gamma)$$
$$\tan(\gamma) \rightarrow \text{positive}$$

Solve for cosine from sine using trig identities

—

Solve:
$$\sin(\gamma) = \frac{4}{6}$$
$$\cos(\gamma) = ?$$

A	B
$\cos(\gamma) = \frac{\sqrt{5}}{4}$	$\cos(\gamma) = \frac{\sqrt{5}}{3}$

4 Using:
$$\sin^2(\beta) = 1 - \cos^2(\beta)$$
$$\tan(\beta) \rightarrow \text{positive}$$

Solve for cosine from sine using trig identities

—

Solve:
$$\sin(\beta) = \frac{1}{4}$$
$$\cos(\beta) = ?$$

A	B
$\cos(\beta) = \frac{\sqrt{22}}{4}$	$\cos(\beta) = \frac{\sqrt{15}}{4}$

5 Using:
$$\sin^2(\alpha) = 1 - \cos^2(\alpha)$$
$$\tan(\alpha) \rightarrow \text{negative}$$

Solve for cosine from sine using trig identities

—

Solve:
$$\sin(\alpha) = \frac{2}{6}$$
$$\cos(\alpha) = ?$$

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

6 Using:
$$\sin^2(\alpha) = 1 - \cos^2(\alpha)$$
$$\tan(\alpha) \rightarrow \text{positive}$$

Solve for cosine from sine using trig identities

—

Solve:
$$\sin(\alpha) = -\frac{2}{7}$$
$$\cos(\alpha) = ?$$

A	B
$\cos(\alpha) = -\frac{3\sqrt{5}}{\sqrt{21}}$	$\cos(\alpha) = -\frac{3\sqrt{5}}{7}$

7 Using:
$$\sin^2(\beta) = 1 - \cos^2(\beta)$$
$$\tan(\beta) \rightarrow \text{positive}$$

Solve for cosine from sine using trig identities

—

Solve:
$$\sin(\beta) = -\frac{5}{6}$$
$$\cos(\beta) = ?$$

A	B
$\cos(\beta) = -\frac{\sqrt{11}}{6}$	$\cos(\beta) = -\frac{\sqrt{11}}{\sqrt{42}}$

8 Using:
$$\sin^2(\beta) = 1 - \cos^2(\beta)$$
$$\tan(\beta) \rightarrow \text{positive}$$

Solve for cosine from sine using trig identities

—

Solve:
$$\sin(\beta) = -\frac{1}{8}$$
$$\cos(\beta) = ?$$

A	B
$\cos(\beta) = -\frac{\sqrt{57}}{8}$	$\cos(\beta) = -\frac{3\sqrt{7}}{8}$