Practice questions

Show your working. Try these without looking at the answers.

1. Find every solution.

$$\sin\theta = \frac{1}{2}, \qquad 0^\circ \leq \theta < 360^\circ$$

2. Find every solution.

$$\cos\theta = -\frac{1}{2}, \qquad 0^\circ \leq \theta < 360^\circ$$

3. Find every solution.

$$\tan\theta = 1, \qquad 0^\circ \leq \theta < 360^\circ$$

4. Find every solution.

$$2\sin^2\theta - 1 = 0, \qquad 0^\circ \leq \theta < 360^\circ$$

5. Simplify using a standard identity.

$$1 - \cos^2\theta$$