

Trigonometry Equations and Identities

– Section Test

- 1) Solve $\cos \theta = 0.3$ for $0^\circ \leq \theta \leq 360^\circ$, giving your answers rounded to 1 decimal place.
- 2) Solve $\tan x = 0.5$ for $0^\circ \leq \theta \leq 360^\circ$, giving your answers rounded to 1 decimal place.
- 3) Solve $2 \sin \theta + 1 = 0$ for $0^\circ \leq \theta \leq 360^\circ$, giving your answers rounded to 1 decimal place.
- 4) Solve $3 \tan \theta - 2 = 0$ for $-180^\circ \leq \theta \leq 180^\circ$, giving your answers rounded to 1 decimal place.
- 5) Solve $2 \cos \theta - \sin \theta = 0$ for $0^\circ \leq \theta \leq 360^\circ$, giving your answers rounded to 1 decimal place.
- 6) Which of the following is a list of all the values with $0^\circ \leq \theta \leq 360^\circ$ which satisfy $(2 \cos \theta + 1)(\cos \theta - 2) = 0$?

(a) 60° and 300°	(b) 120° and 240°
(c) 0° , 120° , 240° and 360°	(d) 0° , 60° , 300° and 360°
- 7) Solve $2 \sin^2 \theta - \sin \theta - 1 = 0$ for $0^\circ \leq \theta \leq 360^\circ$. Give your answers to 3 significant figures.
- 8) Solve $2 \sin \theta \cos \theta - \sin \theta = 0$ for $0^\circ \leq \theta \leq 360^\circ$. Give your answers to 3 significant figures.
- 9) Solve $\tan^2 \theta - 1 = 0$ for $0^\circ \leq \theta \leq 360^\circ$. Give your answers to 3 significant figures.
- 10) Solve $\cos^2 \theta + \cos \theta = \sin^2 \theta$ for $0^\circ \leq \theta \leq 360^\circ$. Give your answers to 3 significant figures.

