N5 - Relationships

Worksheet 3

Silver Level

Outcome 1 - Solving Trig Equations

Solve the following trig equations…

1. $9 \sin x° + 4 = 0 \quad 0 \leq x \leq 360°$
2. $5 \cos x° + 2 = 0 \quad 0 \leq x \leq 360°$
3. $14 \tan x° + 9 = 0 \quad 0 \leq x \leq 360°$
4. $8 \cos x° + 12 = 7 \quad 0 \leq x \leq 360°$
5. $6 \tan x° + 7 = 2 \quad 0 \leq x \leq 360°$
6. $7 \sin x° + 5 = 2 \quad 0 \leq x \leq 360°$

Outcome 2 - Trig Identities

Prove the following trig identities…

1. Show that

$$10tanxcosx = 10sinx$$

2. Show that

$$\frac{1}{cosx} \times tanx = \frac{sinx}{cos^2 x}$$