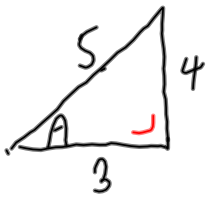
Compound angles

Q 26
p.402

Logs P. 15

$\sin\frac{\pi}{6} = \frac{1}{2}$



only sin is positive in 2nd Quadrant

A is between 90° & 180° $\frac{\pi}{6} = 30°$

$$\sin\left(A + \frac{\pi}{6}\right) + \sin\left(A - \frac{\pi}{6}\right) = 4\frac{\sqrt{3}}{5}$$

$\sin A = ?$ $\tan A = ?$

$2\sin A\cos B = \sin(A+B) + \sin(A-B)$

$$LHS = 2\sin A\cos\frac{\pi}{6}$$

$$= 2\left(\frac{\sqrt{3}}{2}\right)\sin A = 4\frac{\sqrt{3}}{5}$$

$$\sin A = \frac{4}{5}$$

$$\tan A = \frac{4}{3}$$

$$\tan A = -4/3$$