Practice worksheet | Further trigonometry

Compound-angle identities

Name: _____ Date: _____

6 questions | 12 marks

1. Find $\sin 15^\circ$ exactly. [2 marks]

2. Find $\cos 75^\circ$ exactly. [2 marks]

3. Find $\tan 75^\circ$ exactly. [2 marks]

4. For acute A, B with $\sin A = \frac{5}{13}$ and $\sin B = \frac{3}{5}$, find $\sin(A + B)$. [2 marks]

5. Given $\tan A = 2$, $\tan B = \frac{1}{3}$, calculate $\tan(A - B)$. [2 marks]

6. Disprove $\cos(A + B) = \cos A + \cos B$. [2 marks]