Practice worksheet | Further trigonometry

# Double-angle identities and derived forms

Name: _____ Date: _____

6 questions | 12 marks

**1.** If $\cos x = 3/5$, calculate $\cos 2x$. [2 marks]

**2.** If $\tan x = 1/2$, calculate $\tan 2x$. [2 marks]

**3.** Rewrite $\cos^2(3x)$ using a multiple-angle cosine. [2 marks]

**4.** Find $\cos(\pi/8)$ exactly. [2 marks]

**5.** Solve $\cos 2x = 1$ on $[0, 2\pi)$. [2 marks]

**6.** For $x$ in quadrant II with $\sin x = 3/5$, find $\sin 2x$. [2 marks]