Solve these equations giving all solutions between 0° and 180°. Write your answers to three significant figures where appropriate.

a 
$$\sin 2x = 0.5$$

**b** 
$$\sin 3x = 1$$

**c** 
$$\cos 2x = 0.5$$

d 
$$\cos\left(\frac{x}{2}\right) = 0.5$$

e 
$$\tan 2x = 1$$

f 
$$\cos 2\theta = -0.6$$

g 
$$\tan 2\theta = -0.5$$

**h** 
$$\tan\left(\frac{\theta}{2}\right) = \sqrt{3}$$

$$i \quad \sin 4x = \frac{\sqrt{2}}{2}$$

$$\mathbf{j} \quad \tan\left(\frac{\theta}{3}\right) = 0.3$$