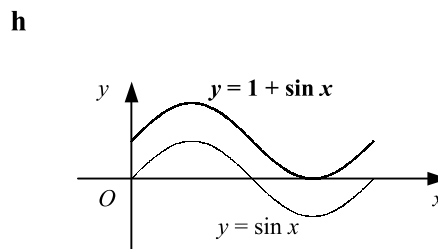
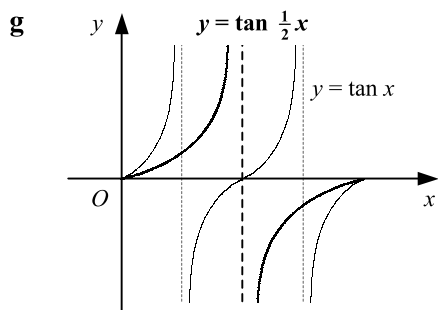
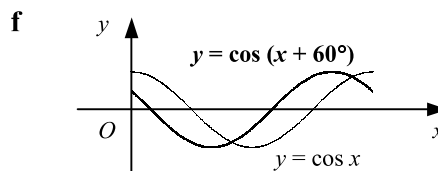
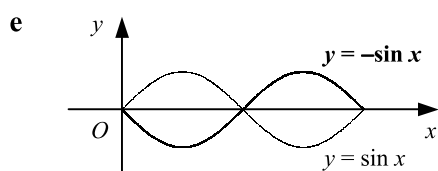
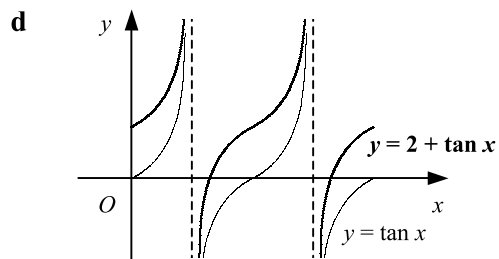
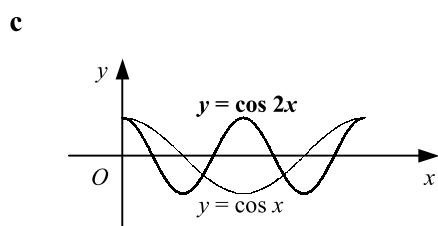
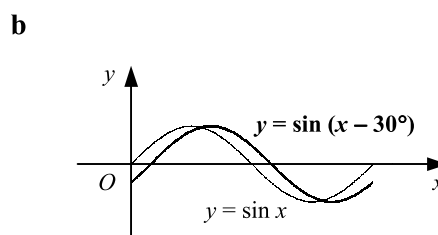
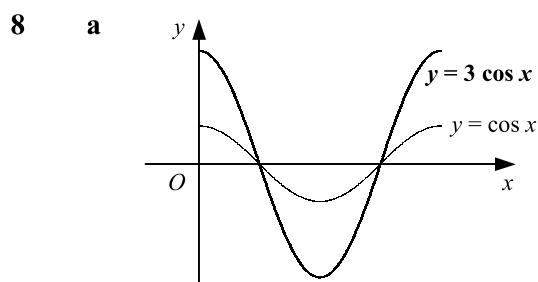


C2 TRIGONOMETRY*Answers - Worksheet D*

- 1 **a** 0.755 **b** -0.354 **c** 0.530 **d** -0.255
- 2 **a** $= \frac{1}{2}$ **b** $= \frac{1}{\sqrt{2}}$ **c** = 1 **d** $= \frac{\sqrt{3}}{2}$
e = 1 **f** $= \frac{1}{\sqrt{3}}$ **g** $= -\cos 60^\circ = -\frac{1}{2}$ **h** $= \sin 45^\circ = \frac{1}{\sqrt{2}}$
i $= \tan 30^\circ = \frac{1}{\sqrt{3}}$ **j** $= -\cos 45^\circ = -\frac{1}{\sqrt{2}}$ **k** $= -\sin 60^\circ = -\frac{\sqrt{3}}{2}$ **l** $= -\tan 60^\circ = -\sqrt{3}$
m $= \cos 30^\circ = \frac{\sqrt{3}}{2}$ **n** $= -\tan 30^\circ = -\frac{1}{\sqrt{3}}$ **o** $= \cos 60^\circ = \frac{1}{2}$ **p** $= \sin 45^\circ = \frac{1}{\sqrt{2}}$
q $= -\tan 45^\circ = -1$ **r** $= \sin 60^\circ = \frac{\sqrt{3}}{2}$ **s** $= \tan 30^\circ = \frac{1}{\sqrt{3}}$ **t** $= -\cos 30^\circ = -\frac{\sqrt{3}}{2}$
- 3 **a** 0.913 **b** -0.851 **c** 0.042 **d** 0.252
- 4 **a** $= \frac{1}{2}$ **b** = 0 **c** $= \frac{1}{\sqrt{2}}$ **d** $= \sqrt{3}$
e $= \frac{1}{2}$ **f** $= \sin \frac{\pi}{3} = \frac{\sqrt{3}}{2}$ **g** $= -\tan \frac{\pi}{4} = -1$ **h** $= -\cos \frac{\pi}{6} = -\frac{\sqrt{3}}{2}$
i $= -\tan \frac{\pi}{3} = -\sqrt{3}$ **j** $= -\cos \frac{\pi}{4} = -\frac{1}{\sqrt{2}}$ **k** $= -\sin \frac{\pi}{6} = -\frac{1}{2}$ **l** $= \tan \frac{\pi}{6} = \frac{1}{\sqrt{3}}$
m $= \sin 0 = 0$ **n** $= -\tan \frac{\pi}{4} = -1$ **o** $= -\cos \frac{\pi}{3} = -\frac{1}{2}$ **p** $= -\sin \frac{\pi}{3} = -\frac{\sqrt{3}}{2}$
- 5 **a** (0, 0), (180, 0), (360, 0), (540, 0), (720, 0)
b (90, 1), (270, -1), (450, 1), (630, -1)
- 6 **a** (0, 0), (180, 0), (360, 0), (540, 0), (720, 0)
b $x = 90, x = 270, x = 450, x = 630$
- 7 **a** stretch by a factor of 3 in the y -direction about the x -axis
b stretch by a factor of $\frac{1}{4}$ in the x -direction about the y -axis
c translation by 60 units in the negative x -direction
d reflection in the y -axis



9 a $(-90^\circ, -2), (90^\circ, 2)$

b $(-180^\circ, 1), (0, 3), (180^\circ, 1)$

c $(-150^\circ, -1), (-90^\circ, 1), (-30^\circ, -1),$
 $(30^\circ, 1), (90^\circ, -1), (150^\circ, 1)$

d $(-135^\circ, -1), (45^\circ, 1)$

10 a 360°

b 180°

c 360°

d 180°

e 180°

f 1080°

