



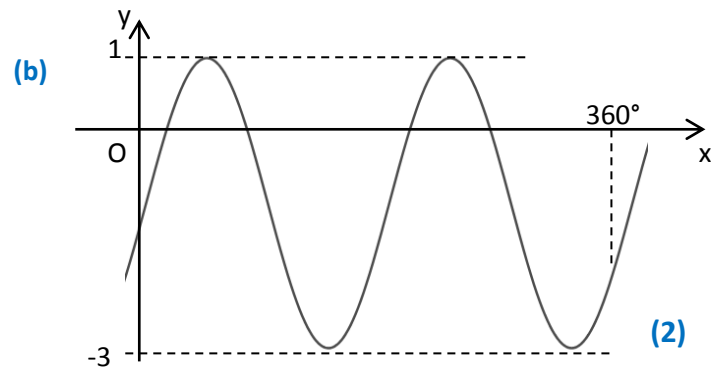
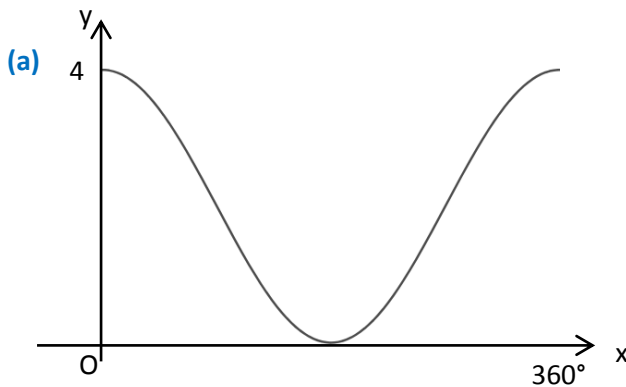
SPTA

Higher Homework

Trigonometry (B)



1. Write down the equation of the following trig graphs



2. Find the exact value of each of the following

(a) $\sin 240^\circ$ (b) $\cos 510^\circ$ (c) $\tan \frac{4\pi}{3}$ (d) $\cos \frac{7\pi}{4}$ (4)

3. Write down the minimum and maximum values of $6 \sin \left(x + \frac{\pi}{6} \right) + 4$ (2)

4. Calculate the exact value of

(a) $2 \sin 300^\circ \cos 150^\circ$ (b) $\cos^2 \frac{5\pi}{3} + \sin^2 \frac{3\pi}{2}$ (c) $\frac{1}{\tan 150^\circ}$ (6)

5. Show that $\sqrt{2} \sin 45^\circ + \frac{\sqrt{3}}{2} \cos 135^\circ - \frac{1}{2} \tan 315^\circ = 0$ (3)

6. Solve the following

(a) $\tan \frac{x}{2} = -1$ for $0 \leq x < 360^\circ$ (b) $4 \cos^2 x - 1 = 0$ for $0 \leq x \leq 2\pi$ (5)