[12-02-06-T11]

Graphs of trig functions

■ **Graphs. Label the numbers on the x-axis at which the function takes a value of zero. Also label the numbers on the x-axis at which the function attains a local maximum or a local minimum value. Indicate asymptotic lines, when present, by dashing them. Your graph must include one full period.**

[1] Graph $y = \sin 2\,x$.

[2] Graph $y = \sin\left(2\,x - \frac{\pi}{2}\right)$.

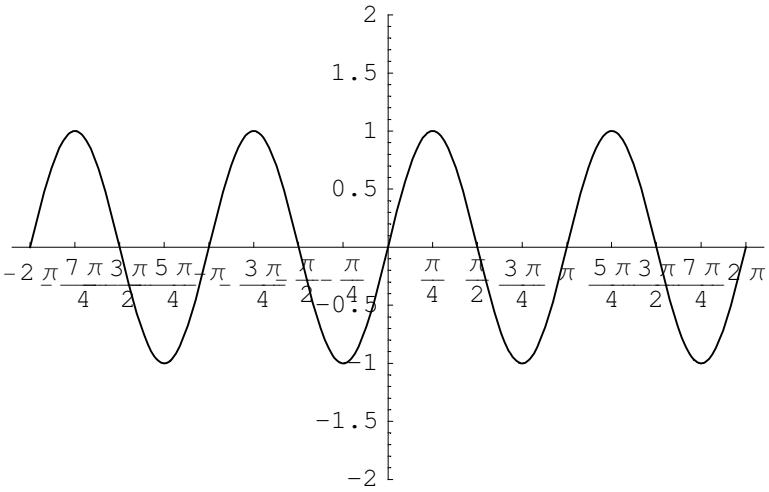
[3] Graph $y = \frac{3}{2}\sin\left(3\,x - \pi\right)$.

[4] Graph $y = \sin\left(\frac{x}{2} - \frac{\pi}{6}\right)$.

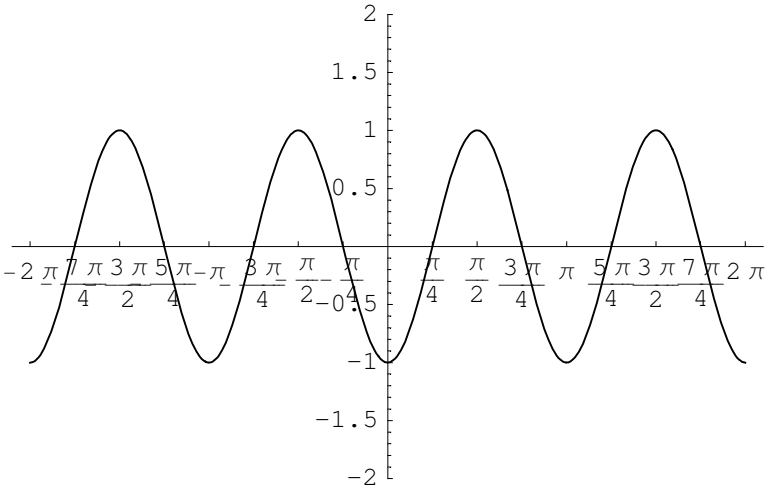
[5] Graph $y = \sin\left(\frac{x}{2} + \frac{\pi}{6}\right)$.

Answers

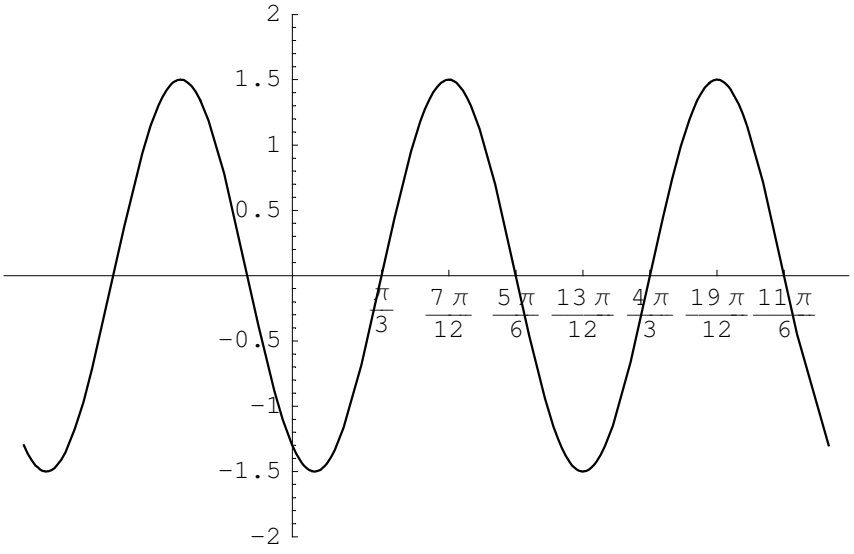
[1] Graph $y = \sin 2\,x$.



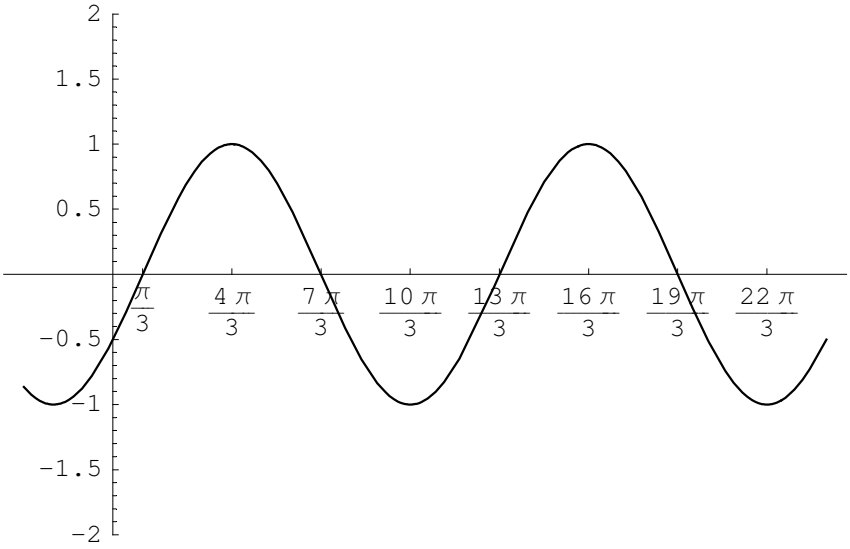
[2] Graph $y = \sin\left(2\,x - \frac{\pi}{2}\right)$.



[3] Graph $y = \frac{3}{2}\sin(3x - \pi)$.



[4] Graph $y = \sin(\frac{x}{2} - \frac{\pi}{6})$.



[5] Graph $y = \sin\left(\frac{x}{2} + \frac{\pi}{6}\right)$.