Calculus ex02 **10 Apr. 2019**

○0 ○0 ○0 ○0 ○0 ○0 ○0 ○0
○1 ○1 ○1 ○1 ○1 ○1 ○1 ○1
○2 ○2 ○2 ○2 ○2 ○2 ○2 ○2
○3 ○3 ○3 ○3 ○3 ○3 ○3 ○3
○4 ○4 ○4 ○4 ○4 ○4 ○4 ○4
○5 ○5 ○5 ○5 ○5 ○5 ○5 ○5
○6 ○6 ○6 ○6 ○6 ○6 ○6 ○6
○7 ○7 ○7 ○7 ○7 ○7 ○7 ○7
○8 ○8 ○8 ○8 ○8 ○8 ○8 ○8
○9 ○9 ○9 ○9 ○9 ○9 ○9 ○9

⟵ Please encode your student number, and write your first and last names below.

First name and last name: ....

Question [sinp01] ♣ Solve the equation $\sin x = 0\,(0 \le x \le 2\pi)$.

● 0 ○ $\frac{\pi}{6}$ ○ $\frac{\pi}{4}$ ○ $\frac{\pi}{3}$ ○ $\frac{\pi}{2}$ ○ $\frac{2}{3}\pi$ ○ $\frac{3}{4}\pi$
○ $\frac{5}{6}\pi$ ● π ○ $\frac{7}{6}\pi$ ○ $\frac{5}{4}\pi$ ○ $\frac{4}{3}\pi$ ○ $\frac{3}{2}\pi$ ○ $\frac{5}{3}\pi$
○ $\frac{7}{4}\pi$ ○ $\frac{11}{6}\pi$ ● 2π ○ *None of these answers are correct.*

Question [sinp02] ♣ Solve the equation $\sin x = \frac{1}{2}\,(0 \le x \le 2\pi)$.

○ 0 ● $\frac{\pi}{6}$ ○ $\frac{\pi}{4}$ ○ $\frac{\pi}{3}$ ○ $\frac{\pi}{2}$ ○ $\frac{2}{3}\pi$ ○ $\frac{3}{4}\pi$
● $\frac{5}{6}\pi$ ○ π ○ $\frac{7}{6}\pi$ ○ $\frac{5}{4}\pi$ ○ $\frac{4}{3}\pi$ ○ $\frac{3}{2}\pi$ ○ $\frac{5}{3}\pi$
○ $\frac{7}{4}\pi$ ○ $\frac{11}{6}\pi$ ○ 2π ○ *None of these answers are correct.*

Question [sinp03] ♣ Solve the equation $\sin x = \frac{1}{\sqrt{2}}\,(0 \le x \le 2\pi)$.

○ 0 ○ $\frac{\pi}{6}$ ● $\frac{\pi}{4}$ ○ $\frac{\pi}{3}$ ○ $\frac{\pi}{2}$ ○ $\frac{2}{3}\pi$ ● $\frac{3}{4}\pi$
○ $\frac{5}{6}\pi$ ○ π ○ $\frac{7}{6}\pi$ ○ $\frac{5}{4}\pi$ ○ $\frac{4}{3}\pi$ ○ $\frac{3}{2}\pi$ ○ $\frac{5}{3}\pi$
○ $\frac{7}{4}\pi$ ○ $\frac{11}{6}\pi$ ○ 2π ○ *None of these answers are correct.*

Question [sinp04] ♣ Solve the equation $\sin x = \frac{\sqrt{3}}{2}\,(0 \le x \le 2\pi)$.

○ 0 ○ $\frac{\pi}{6}$ ○ $\frac{\pi}{4}$ ● $\frac{\pi}{3}$ ○ $\frac{\pi}{2}$ ● $\frac{2}{3}\pi$ ○ $\frac{3}{4}\pi$
○ $\frac{5}{6}\pi$ ○ π ○ $\frac{7}{6}\pi$ ○ $\frac{5}{4}\pi$ ○ $\frac{4}{3}\pi$ ○ $\frac{3}{2}\pi$ ○ $\frac{5}{3}\pi$
○ $\frac{7}{4}\pi$ ○ $\frac{11}{6}\pi$ ○ 2π ○ *None of these answers are correct.*

Question [sinp05] ♣ Solve the equation$\sin x = 1\,(0 \le x \le 2\pi)$.

○ 0 ○ $\frac{\pi}{6}$ ○ $\frac{\pi}{4}$ ○ $\frac{\pi}{3}$ ● $\frac{\pi}{2}$ ○ $\frac{2}{3}\pi$ ○ $\frac{3}{4}\pi$
○ $\frac{5}{6}\pi$ ○ π ○ $\frac{7}{6}\pi$ ○ $\frac{5}{4}\pi$ ○ $\frac{4}{3}\pi$ ○ $\frac{3}{2}\pi$ ○ $\frac{5}{3}\pi$
○ $\frac{7}{4}\pi$ ○ $\frac{11}{6}\pi$ ○ 2π ○ *None of these answers are correct.*

Question [sinm02] ♣ Solve the equation $\sin x = -\frac{1}{2}\,(0 \le x \le 2\pi)$.

○ 0 ○ $\frac{\pi}{6}$ ○ $\frac{\pi}{4}$ ○ $\frac{\pi}{3}$ ○ $\frac{\pi}{2}$ ○ $\frac{2}{3}\pi$ ○ $\frac{3}{4}\pi$
○ $\frac{5}{6}\pi$ ○ π ● $\frac{7}{6}\pi$ ○ $\frac{5}{4}\pi$ ○ $\frac{4}{3}\pi$ ○ $\frac{3}{2}\pi$ ○ $\frac{5}{3}\pi$
○ $\frac{7}{4}\pi$ ● $\frac{11}{6}\pi$ ○ 2π ○ *None of these answers are correct.*

Question [sinm03] ♣ Solve the equation $\sin x = -\frac{1}{\sqrt{2}}\,(0 \le x \le 2\pi)$.

○ 0 ○ $\frac{\pi}{6}$ ○ $\frac{\pi}{4}$ ○ $\frac{\pi}{3}$ ○ $\frac{\pi}{2}$ ○ $\frac{2}{3}\pi$ ○ $\frac{3}{4}\pi$
○ $\frac{5}{6}\pi$ ○ π ○ $\frac{7}{6}\pi$ ● $\frac{5}{4}\pi$ ○ $\frac{4}{3}\pi$ ○ $\frac{3}{2}\pi$ ○ $\frac{5}{3}\pi$
● $\frac{7}{4}\pi$ ○ $\frac{11}{6}\pi$ ○ 2π ○ *None of these answers are correct.*

Question [sinm04] ♣ Solve the equation $\sin x = -\frac{\sqrt{3}}{2}\,(0 \le x \le 2\pi)$.

○ 0 ○ $\frac{\pi}{6}$ ○ $\frac{\pi}{4}$ ○ $\frac{\pi}{3}$ ● $\frac{\pi}{2}$ ○ $\frac{2}{3}\pi$ ● $\frac{3}{4}\pi$
○ $\frac{5}{6}\pi$ ○ π ○ $\frac{7}{6}\pi$ ○ $\frac{5}{4}\pi$ ● $\frac{4}{3}\pi$ ○ $\frac{3}{2}\pi$ ● $\frac{5}{3}\pi$
○ $\frac{7}{4}\pi$ ○ $\frac{11}{6}\pi$ ○ 2π ○ *None of these answers are correct.*

Question [sinm05] ♣ Solve the equation $\sin x = -1\,(0 \le x \le 2\pi)$.

○ 0 ○ $\frac{\pi}{6}$ ○ $\frac{\pi}{4}$ ○ $\frac{\pi}{3}$ ○ $\frac{\pi}{2}$ ○ $\frac{2}{3}\pi$ ○ $\frac{3}{4}\pi$
○ $\frac{5}{6}\pi$ ○ π ○ $\frac{7}{6}\pi$ ○ $\frac{5}{4}\pi$ ○ $\frac{4}{3}\pi$ ● $\frac{3}{2}\pi$ ○ $\frac{5}{3}\pi$
○ $\frac{7}{4}\pi$ ○ $\frac{11}{6}\pi$ ○ 2π ○ *None of these answers are correct.*

Question [cosp01] ♣ Solve the equation $\cos x = 1\,(0 \le x \le 2\pi)$.

● 0 ○ $\frac{\pi}{6}$ ○ $\frac{\pi}{4}$ ○ $\frac{\pi}{3}$ ○ $\frac{\pi}{2}$ ○ $\frac{2}{3}\pi$ ○ $\frac{3}{4}\pi$
○ $\frac{5}{6}\pi$ ○ π ○ $\frac{7}{6}\pi$ ○ $\frac{5}{4}\pi$ ○ $\frac{4}{3}\pi$ ○ $\frac{3}{2}\pi$ ○ $\frac{5}{3}\pi$
○ $\frac{7}{4}\pi$ ○ $\frac{11}{6}\pi$ ● 2π ○ *None of these answers are correct.*

Question [cosp02] ♣ Solve the equation $\cos x = \frac{\sqrt{3}}{2}\,(0 \le x \le 2\pi)$.

○ 0 ● $\frac{\pi}{6}$ ○ $\frac{\pi}{4}$ ○ $\frac{\pi}{3}$ ○ $\frac{\pi}{2}$ ○ $\frac{2}{3}\pi$ ○ $\frac{3}{4}\pi$
○ $\frac{5}{6}\pi$ ○ π ○ $\frac{7}{6}\pi$ ○ $\frac{5}{4}\pi$ ○ $\frac{4}{3}\pi$ ○ $\frac{3}{2}\pi$ ○ $\frac{5}{3}\pi$
○ $\frac{7}{4}\pi$ ● $\frac{11}{6}\pi$ ○ 2π ○ *None of these answers are correct.*

Question [cosp03] ♣ Solve the equation $\cos x = \frac{1}{\sqrt{2}}\,(0 \le x \le 2\pi)$.

○ 0 ○ $\frac{\pi}{6}$ ● $\frac{\pi}{4}$ ○ $\frac{\pi}{3}$ ○ $\frac{\pi}{2}$ ○ $\frac{2}{3}\pi$ ○ $\frac{3}{4}\pi$
○ $\frac{5}{6}\pi$ ○ π ○ $\frac{7}{6}\pi$ ○ $\frac{5}{4}\pi$ ○ $\frac{4}{3}\pi$ ○ $\frac{3}{2}\pi$ ○ $\frac{5}{3}\pi$
● $\frac{7}{4}\pi$ ○ $\frac{11}{6}\pi$ ○ 2π ○ *None of these answers are correct.*

Question [cosp04] ♣ Solve the equation $\cos x = \frac{1}{2}\,(0 \le x \le 2\pi)$.

○ 0 ○ $\frac{\pi}{6}$ ○ $\frac{\pi}{4}$ ● $\frac{\pi}{3}$ ○ $\frac{\pi}{2}$ ○ $\frac{2}{3}\pi$ ○ $\frac{3}{4}\pi$
○ $\frac{5}{6}\pi$ ○ π ○ $\frac{7}{6}\pi$ ○ $\frac{5}{4}\pi$ ○ $\frac{4}{3}\pi$ ○ $\frac{3}{2}\pi$ ● $\frac{5}{3}\pi$
○ $\frac{7}{4}\pi$ ○ $\frac{11}{6}\pi$ ○ 2π ○ *None of these answers are correct.*

Question [cosp05] ♣ Solve the equation $\cos x = 0\,(0 \le x \le 2\pi)$.

○ 0 ○ $\frac{\pi}{6}$ ○ $\frac{\pi}{4}$ ○ $\frac{\pi}{3}$ ● $\frac{\pi}{2}$ ○ $\frac{2}{3}\pi$ ○ $\frac{3}{4}\pi$
○ $\frac{5}{6}\pi$ ○ π ○ $\frac{7}{6}\pi$ ○ $\frac{5}{4}\pi$ ○ $\frac{4}{3}\pi$ ● $\frac{3}{2}\pi$ ○ $\frac{5}{3}\pi$
○ $\frac{7}{4}\pi$ ○ $\frac{11}{6}\pi$ ○ 2π ○ *None of these answers are correct.*

Question [cosm01] ♣ Solve the equation $\cos x = -\frac{1}{2}\,(0 \le x \le 2\pi)$.

○ 0 ○ $\frac{\pi}{6}$ ○ $\frac{\pi}{4}$ ○ $\frac{\pi}{3}$ ○ $\frac{\pi}{2}$ ● $\frac{2}{3}\pi$ ○ $\frac{3}{4}\pi$
○ $\frac{5}{6}\pi$ ○ π ○ $\frac{7}{6}\pi$ ○ $\frac{5}{4}\pi$ ● $\frac{4}{3}\pi$ ○ $\frac{3}{2}\pi$ ○ $\frac{5}{3}\pi$
○ $\frac{7}{4}\pi$ ○ $\frac{11}{6}\pi$ ○ 2π ○ *None of these answers are correct.*

Question [cosm02] ♣ Solve the equation $\cos x = -\frac{1}{\sqrt{2}}\ (0 \le x \le 2\pi)$.

○ 0 ○ $\frac{\pi}{6}$ ○ $\frac{\pi}{4}$ ○ $\frac{\pi}{3}$ ○ $\frac{\pi}{2}$ ○ $\frac{2}{3}\pi$ ● $\frac{3}{4}\pi$
○ $\frac{5}{6}\pi$ ○ π ○ $\frac{7}{6}\pi$ ● $\frac{5}{4}\pi$ ○ $\frac{4}{3}\pi$ ○ $\frac{3}{2}\pi$ ○ $\frac{5}{3}\pi$
○ $\frac{7}{4}\pi$ ○ $\frac{11}{6}\pi$ ○ 2π ○ *None of these answers are correct.*

Question [cosm03] ♣ Solve the equation $\cos x = -\frac{\sqrt{3}}{2}\ (0 \le x \le 2\pi)$.

○ 0 ○ $\frac{\pi}{6}$ ○ $\frac{\pi}{4}$ ○ $\frac{\pi}{3}$ ○ $\frac{\pi}{2}$ ○ $\frac{2}{3}\pi$ ○ $\frac{3}{4}\pi$
● $\frac{5}{6}\pi$ ○ π ● $\frac{7}{6}\pi$ ○ $\frac{5}{4}\pi$ ○ $\frac{4}{3}\pi$ ○ $\frac{3}{2}\pi$ ○ $\frac{5}{3}\pi$
○ $\frac{7}{4}\pi$ ○ $\frac{11}{6}\pi$ ○ 2π ○ *None of these answers are correct.*

Question [tan01] ♣ Solve the equation $\tan x = 0, (0 \le x \le 2\pi)$.

● 0 ○ $\frac{\pi}{6}$ ○ $\frac{\pi}{4}$ ○ $\frac{\pi}{3}$ ○ $\frac{\pi}{2}$ ○ $\frac{2}{3}\pi$ ○ $\frac{3}{4}\pi$
○ $\frac{5}{6}\pi$ ● π ○ $\frac{7}{6}\pi$ ○ $\frac{5}{4}\pi$ ○ $\frac{4}{3}\pi$ ○ $\frac{3}{2}\pi$ ○ $\frac{5}{3}\pi$
○ $\frac{7}{4}\pi$ ○ $\frac{11}{6}\pi$ ● 2π ○ *None of these answers are correct.*

Question [tan02] ♣ Solve the equation $\tan x = \frac{1}{\sqrt{3}}, (0 \le x \le 2\pi)$.

○ 0 ● $\frac{\pi}{6}$ ○ $\frac{\pi}{4}$ ○ $\frac{\pi}{3}$ ○ $\frac{\pi}{2}$ ○ $\frac{2}{3}\pi$ ○ $\frac{3}{4}\pi$
○ $\frac{5}{6}\pi$ ○ π ● $\frac{7}{6}\pi$ ○ $\frac{5}{4}\pi$ ○ $\frac{4}{3}\pi$ ○ $\frac{3}{2}\pi$ ○ $\frac{5}{3}\pi$
○ $\frac{7}{4}\pi$ ○ $\frac{11}{6}\pi$ ○ 2π ○ *None of these answers are correct.*

Question [tan03] ♣ Solve the equation $\tan x = 1, (0 \le x \le 2\pi)$.

○ 0 ○ $\frac{\pi}{6}$ ● $\frac{\pi}{4}$ ○ $\frac{\pi}{3}$ ○ $\frac{\pi}{2}$ ○ $\frac{2}{3}\pi$ ○ $\frac{3}{4}\pi$
○ $\frac{5}{6}\pi$ ○ π ○ $\frac{7}{6}\pi$ ● $\frac{5}{4}\pi$ ○ $\frac{4}{3}\pi$ ○ $\frac{3}{2}\pi$ ○ $\frac{5}{3}\pi$
○ $\frac{7}{4}\pi$ ○ $\frac{11}{6}\pi$ ○ 2π ○ *None of these answers are correct.*

Question [tan04] ♣ Solve the equation $\tan x = \sqrt{3}, (0 \le x \le 2\pi)$.

○ 0 ○ $\frac{\pi}{6}$ ○ $\frac{\pi}{4}$ ● $\frac{\pi}{3}$ ○ $\frac{\pi}{2}$ ○ $\frac{2}{3}\pi$ ○ $\frac{3}{4}\pi$
○ $\frac{5}{6}\pi$ ○ π ○ $\frac{7}{6}\pi$ ○ $\frac{5}{4}\pi$ ● $\frac{4}{3}\pi$ ○ $\frac{3}{2}\pi$ ○ $\frac{5}{3}\pi$
○ $\frac{7}{4}\pi$ ○ $\frac{11}{6}\pi$ ○ 2π ○ *None of these answers are correct.*

Question [tan05] ♣ Solve the equation $\tan x = -\sqrt{3}, (0 \le x \le 2\pi)$.

○ 0 ○ $\frac{\pi}{6}$ ○ $\frac{\pi}{4}$ ○ $\frac{\pi}{3}$ ○ $\frac{\pi}{2}$ ● $\frac{2}{3}\pi$ ○ $\frac{3}{4}\pi$
○ $\frac{5}{6}\pi$ ○ π ○ $\frac{7}{6}\pi$ ○ $\frac{5}{4}\pi$ ○ $\frac{4}{3}\pi$ ○ $\frac{3}{2}\pi$ ● $\frac{5}{3}\pi$
○ $\frac{7}{4}\pi$ ○ $\frac{11}{6}\pi$ ○ 2π ○ *None of these answers are correct.*

Question [tan06] ♣ Solve the equation $\tan x = -1, (0 \le x \le 2\pi)$.

○ 0 ○ $\frac{\pi}{6}$ ○ $\frac{\pi}{4}$ ○ $\frac{\pi}{3}$ ○ $\frac{\pi}{2}$ ○ $\frac{2}{3}\pi$ ● $\frac{3}{4}\pi$
○ $\frac{5}{6}\pi$ ○ π ○ $\frac{7}{6}\pi$ ○ $\frac{5}{4}\pi$ ○ $\frac{4}{3}\pi$ ○ $\frac{3}{2}\pi$ ○ $\frac{5}{3}\pi$
● $\frac{7}{4}\pi$ ○ $\frac{11}{6}\pi$ ○ 2π ○ *None of these answers are correct.*

Question [tan07] ♣ Solve the equation $\tan x = -\frac{1}{\sqrt{3}}, (0 \le x \le 2\pi)$.

○ 0 ○ $\frac{\pi}{6}$ ○ $\frac{\pi}{4}$ ○ $\frac{\pi}{3}$ ○ $\frac{\pi}{2}$ ○ $\frac{2}{3}\pi$ ○ $\frac{3}{4}\pi$
● $\frac{5}{6}\pi$ ○ π ○ $\frac{7}{6}\pi$ ○ $\frac{5}{4}\pi$ ○ $\frac{4}{3}\pi$ ○ $\frac{3}{2}\pi$ ○ $\frac{5}{3}\pi$
○ $\frac{7}{4}\pi$ ● $\frac{11}{6}\pi$ ○ 2π ○ *None of these answers are correct.*