**1.**(1 pt) Use Newton's method to approximate a root of the equation $x^3 + x + 3 = 0$ as follows.
Let $x_1 = -1$ be the initial approximation.
The second approximation $x_2$ is _____
and the third approximation $x_3$ is _____

**2.**(1 pt) Use Newton's method to approximate a root of the equation $2x^3 + 7x + 3 = 0$ as follows.
Let $x_1 = -1$ be the initial approximation.
The second approximation $x_2$ is _____ ,
and the third approximation $x_3$ is _____ .

**3.**(1 pt) Use Newton's method to approximate a root of the equation $4x^7 + 2x^4 + 3 = 0$ as follows.
Let $x_1 = 1$ be the initial approximation.
The second approximation $x_2$ is _____
and the third approximation $x_3$ is _____

**4.**(1 pt) Use Newton's method to approximate a root of the equation $3\sin(x) = x$ as follows.
Let $x_1 = 1$ be the initial approximation.
The second approximation $x_2$ is _____
and the third approximation $x_3$ is _____

**5.**(1 pt) Use Newton's method to approximate a root of the equation $\cos(x^2 + 4) = x^3$ as follows.
Let $x_1 = 1$ be the initial approximation.
The second approximation $x_2$ is _____

**6.**(1 pt) Use Newton's method to approximate a root of the equation $\cos(x^2 - 7) = x^3$ as follows.
Let $x_1 = 1$ be the initial approximation.
The second approximation $x_2$ is _____
The third approximation $x_3$ is _____

**7.**(1 pt) Find the positive value of $x$ which satisfies $x = 2.100\sin(x)$. Give the answer to four places of accuracy._____
Remember to calculate the trig functions in radian mode.

**8.**(1 pt) Find the positive value of $x$ which satisfies $x = 0.50000000\cos(x)$. Give the answer to six places of accuracy._____
Remember to calculate the trig functions in radian mode.

**9.**(1 pt) Find the smallest positive value of $x$ which satisfies –

$$x = 2.900\cos(3.000x)$$

. Give the answer to four places of accuracy._____
Remember to calculate the trig functions in radian mode.