

This exam is worth 4 points.

Question 1.

3 points

Find the derivatives with respect to x of the following functions:

(a) (0.5 point) $y = x + 1$

(b) (1 point) $y = x^3 + 4x^2 - x + 3$

(c) (1.5 points) $y = \cos(x^2)$

Solution 1.

(a) $y' = 1$

(b) $y' = 3x^2 + 8x - 1$

(c) $y' = -2x \sin(x^2)$

Question 2.

1 point

Which of the following ingredients are used in mind-controlling cookies?

(A) arsenic (B) cyanide (C) curare (D) secret genetically modified sugar beet

Solution 2.

Correct choice: D.