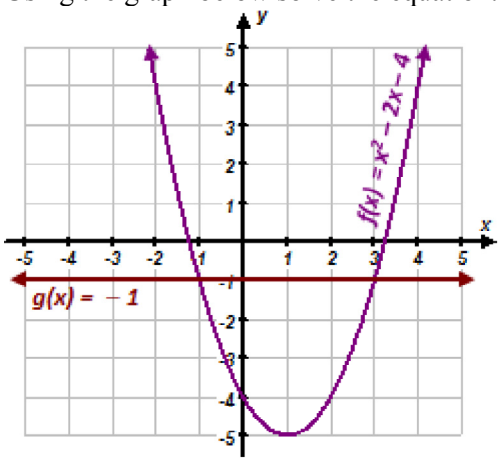
Name: _____ **Class:** _____ **Date:** _____ **ID: A**

Unit 06-06 - Solving Equations by Graphing

Multiple Choice
Identify the choice that best completes the statement or answers the question.

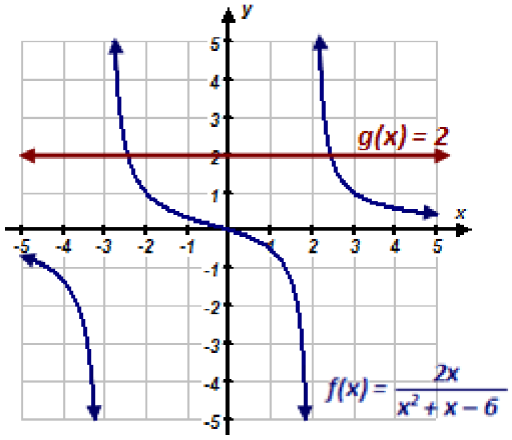
____ 1. Using the graph below solve the equation: $x^2 - 2x - 4 = -1$



a. $x = -1$ *or* $x = 3$
b. $x = -1$ *or* $x = -4$
c. $x \approx -2.14$ *or* $x \approx 4.24$
d. $x \approx -1.24$ *or* $x \approx 3.24$

____ 2. Using the graph below to find the best approximation of the solution to the following equation:

$$\frac{2x}{x^2 + x - 6} = 2$$



a. $x \approx -2.5$ or $x \approx 2.5$
b. $x \approx 0$
c. $x \approx -3$ or $x \approx 2$
d. $x \approx 2$

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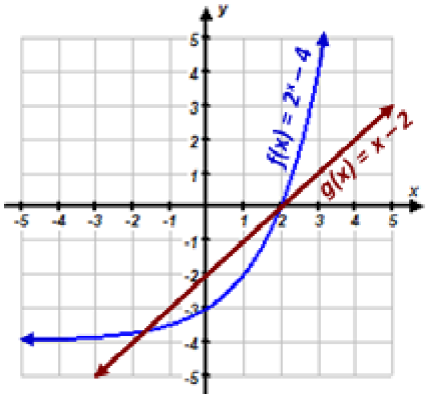
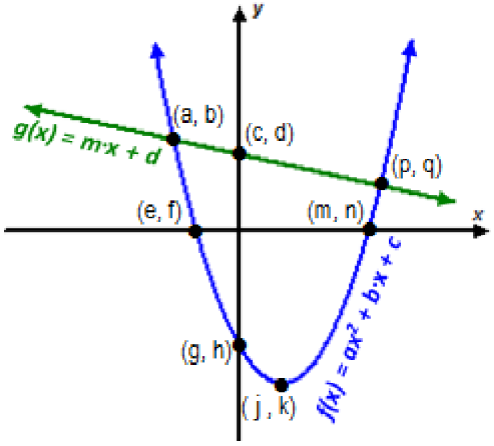
____ 3. Using the graph below solve the equation: $2^x - 4 = x - 2$



a. $x \approx -3.7$ or $x = 0$
b. $x \approx -1.7$ or $x = 2$
c. $x = -2$ or $x = 2$
d. $x = -3$ or $x = -2$

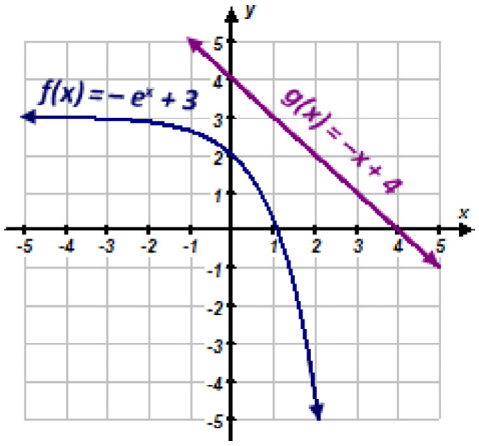
____ 4. Consider the equation $ax^2 + b \cdot x + c = m \cdot x + d$ where *a, b, c, m*, and *d* are all constants.



Given the graph above what values of ***x***, make the statement $ax^2 + b \cdot x + c = m \cdot x + d$ true?

a. $x = e, m$
b. $x = a, p$
c. $x = c, g$
d. $x = b, q$

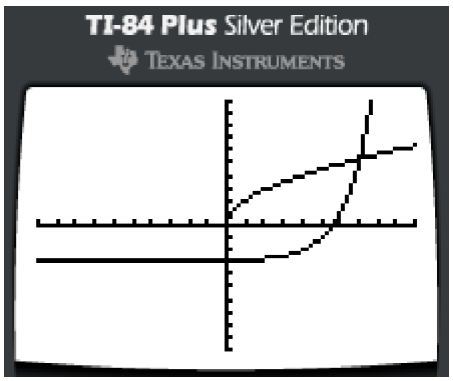
____ 5. Using the graph below solve the equation: $-e^x + 3 = -x + 4$



a. $x = 2$ or $x = 4$
b. $x = 1$
c. $x = 1$ or $x = 4$
d. No Real Solution

____ 6. Use your TI-83/84 Calculator to graph each side and then, use the "**Intersect**" command to find a solution to the nearest hundredth of the following equation:

$$2^{(x-4)} - 3 = 2\sqrt{x}$$



a. $x \approx 3.42$
b. $x \approx 3.70$
c. $x \approx 5.31$
d. $x \approx 7.06$