Math 0090 Lab Worksheet #15

Objective: Solve problems #1 - #10 involving functional notation. Problems #11 through #15 are review problems.

1. If $f(x) = -2x + 5$, evaluate $f(-2)$.

   A. -1

   B. $4x$ - 10

   C. $4x$ +5

   D. 9

2. If $f(x) = x^2 - x$, evaluate $f(-2)$.

   A. -6

   B. -2

   C. 2

   D. 6

3. If $f(x) = -x^2 - x$, evaluate $f(-2)$.

   A. -6

   B. -2

   C. 2

   D. 6

4. If $f(x) = 3x^2 + \frac{1}{3}x - 6$, evaluate $f\left(-\frac{1}{3}\right)$.

   A. $-\frac{52}{9}$

   B. $-\frac{20}{9}$

   C. $\frac{20}{9}$

   D. $\frac{52}{9}$

5. If $G(x) = -2x + 5$, evaluate $G(0) - G(1)$.

A. -5

B. -2

C. 2

D. 5

6. If $G(x) = -3x^2 + x - 5$, evaluate $G(0) - G(1)$.

A. -12

B. -5

C. -1

D. 2

7. If $f(x) = \dfrac{2x+10}{x+2}$, evaluate $f(a+2)$.

A. $\dfrac{2a+8}{a+4}$

B. $\dfrac{2a+14}{a+4}$

C. $\dfrac{2a+6}{a+2}$

D. $\dfrac{2a+10}{a+2}$

8. If $f(x) = 2x^2 - 3x + 5$, evaluate $f(-3) - f(-4)$.

A. -33

B. -17

C. 17

D. 97

9. If $f(x) = x^2 - 2x + 1$ and $g(x) = 2x - 3$, evaluate $f\left(\frac{3}{2}\right) + g(2)$..

A. -1

B. $\frac{1}{4}$

C. 1

D. $\frac{5}{4}$

10. If $f(x) = -x^2 - 2x$, and $g(x) = -2x - 2$ evaluate $f(-2) - g(-2)$.

A. -2

B. 0

C. 2

D. 16

11. Write in standard form of the equation of a line that has slope – 4 and y-intercept (0, 2).

A. $x - 4y = 2$

B. $x + 4y = 2$

C. $y = -4x + 2$

D. $4x + y = 2$

12. Write in standard form of the equation of a line that has slope $-\frac{1}{4}$ and y-intercept $(0, \frac{1}{2})$.

A. $x - 4y = 2$

B. $x + 4y = 2$

C. $y = -\frac{1}{4}x + \frac{1}{2}$

D. $4x + y = 2$

13. Find one factor of $6x^2 + 2x - 4$.

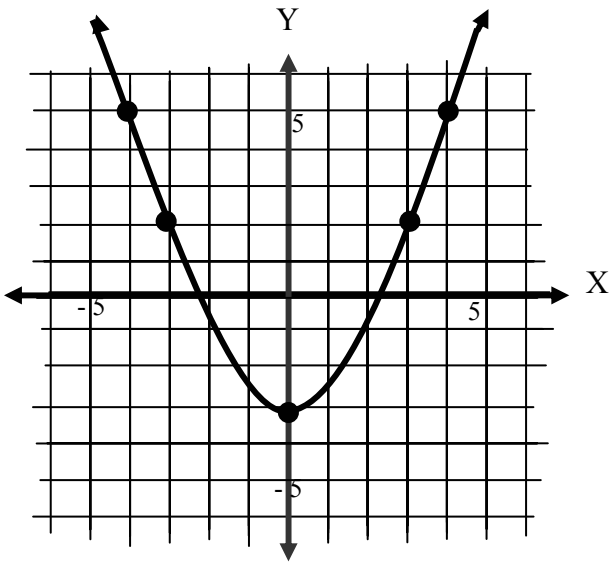
A. $(3x - 4)$

B. $(3x - 2)$

C. $(x - 1)$

D. $(6x - 1)$

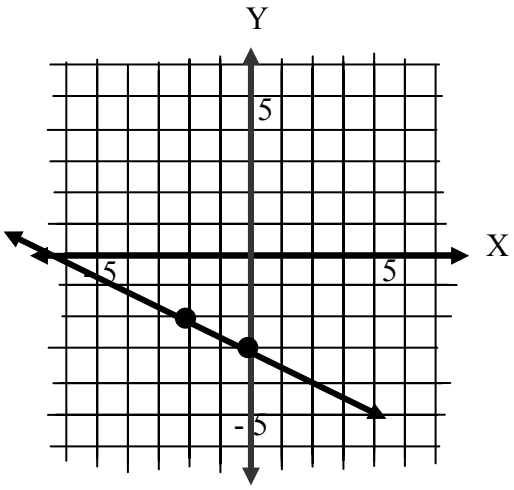
14. Which equation best represents the graph below?



A. $y = -\frac{1}{2}x^2 - 3$ B. $y = \frac{1}{2}x - 3$

C. $y = \frac{1}{2}x^2 - 3$ D. $y = \frac{1}{2}x^2 + 3$

15. Which equation represents the graph below?



A. $y = -\frac{1}{2}x^2 - 3$ B. $y = -\frac{1}{2}x - 3$

C. $y = \frac{1}{2}x - 3$ D. $y = 2x + 3$