Brooke Gines

Exam 1

2. $\frac{2}{3}$

3. $\frac{-4x^2 - x - 4}{8 - 3x^2}$ $\quad \frac{-4(-2)^2 - (-2) - 4}{8 - 3(-2)^2}$ $\quad \frac{-4(4) + 2 - 4}{8 - 3(4)}$ $\quad \frac{-16 - 2}{8 - 12}$ $\quad \frac{-18}{-4}$

$\frac{18}{4} = \frac{9}{2}$

4. $5(-1)^3 + 3(-1) + 3$ $\quad -5 - 3 + 3$ $\quad -5$

5. $\frac{-3x^2 - 10x}{-2x^2 - 2x}$ $\quad \frac{x(-3x - 10)}{-2x(x - 1)}$ $\quad \frac{-10}{-2(0-1)}$ $\quad \frac{-10}{2}$ $\quad -5$

6. $\frac{4x + 4}{-4}$ $\quad 4k + 4 = -4$ $\quad \frac{4k}{4} = \frac{-8}{4}$ $\quad k = -2$

9. $y = mx + b$ $\quad y - y_1 = m(x - x_1)$ $\quad (1, 1)$

$-2x + 4$

$\frac{-2x}{-2} = \frac{-4}{-2}$ $\quad x = 2$

$-1^2 + 4(1) - 2$

$-1 + 4 - 2$

$-1 + 2$

$y - 1 = -\frac{1}{2}(x - 1)$ $\quad y - 1 = -\frac{x}{2} + \frac{1}{2}$

$+1 \quad +1$

$y = -\frac{x}{2} + \frac{3}{2}$

10. $-\frac{1}{2}x^7$ $\quad -\frac{1}{2}(7)x^6$ $\quad -\frac{7}{2}x^6$

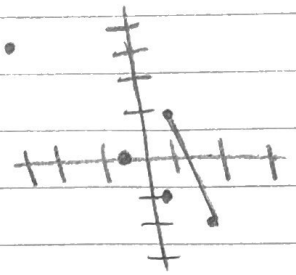
11. $\frac{5(x+h) + 4 - (5x + 4)}{h}$ $\quad \frac{5x + 5h + 20 - 5x - 4}{h}$ $\quad \frac{5h + 16}{h}$

$\frac{5(-6) + 16}{-6}$ $\quad \frac{-30 + 16}{-6}$ $\quad \frac{-14}{-6}$ $\quad \frac{7}{3}$

13. $7(5)x^4+1$

$35x^4+1$

14. $\frac{y_1-y_2}{x_1-x_2}$ $\frac{2+4}{2-3}$ $\frac{6}{1}$ -6



15. $1-3x = -5x^2+2x+11$

$1-3(-1) = -5(-1)^2-2+11$

$1+3 = -5+9$

$4 = 4$

$-3 = -10x+2$

$-3 = -10(-1)+2$

$-3 = 10+2$

$-3 = 12$

17. $\frac{-1+1}{0}$ $\frac{0}{0}$

18. $\frac{2x^4-4x^3+5x^2}{2x^3-3x-2}$ $N > D$ $N < D$

-4

∧

-1