Semester 1 Review:

1. Simplify the expression $2x-4(3x-2)$

2. A line has a lope of -4 and goes through the point (1, -1). Which is the equation of the line in point-slope form?

3. What is the equation of a line that has a lope of -2 and goes through the point (3, 2)?

4. Simplify $\left(y^5\right)^3$

5. Simplify $\left(2x^4\right)^4$

6. Simplify $\left(\frac{a^4}{b^3}\right)^2$

7. Multiply $\left(-6x^3y^6\right)\left(3xy^2\right)$

8. Coefficients of the polynomial $3x^2+2x-5$ are?

9. What is the degree of this polynomial $3a^4b^2+3ab+7$ ?

10. Add $\left(4a^2b-5a+3\right)+\left(-2a\ b-2a-4\right)$.

11. Divide $\frac{x^4y^3}{x^2y^2}$

12.Multiply $(x+4)(x+5)$

13. Multiply $(4x^2+5)(3x^2-2)$

14. Evaluate the polynomial $-3m^2+16n+5$ for m = 2 and n = 3

15. Multiply $(x+8)(x-8)$ (multiply special products)

16. Multiply $(3x+5)^2$ (multiply special products)

17. Multiply $(x^2+4)(x^2+2x-3)$

18. Solve for x. $\frac{52}{4}=\frac{x}{5}$

19. Graph y =x

20. Graph y=-x

21. Graph $y=x^2$

22. Graph $y=-x^2$

23. Solve the system. $\begin{aligned} 3x+4y&=2 \\ 2x-y&=5 \end{aligned}$

24. Graph $y > x-2$

25. Solve the system by graphing. $\begin{aligned} y &> -x+5 \\ y &\le 3x-4 \end{aligned}$