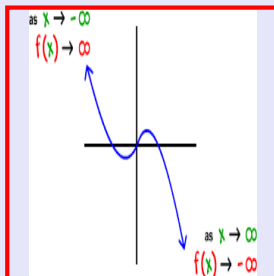


Math 245
Spring 2022
Lecture 1



Math 245
15 Weeks
M-Th
6:00 - 6:55

You must have

- 1) Internet access with printer.
- 2) Access to Canvas. (Canvas App.)
- 3) TI 83 or TI 84 calculator with you in class at all time.
- 4) Final Exam: June 6, 2022

www.mymathclasses.com

Click on Math 245

- 1) Check course **Syllabus**
- 2) Work on **SG O.**
- 3) Arrive **on time**
- 4) **No Chat** during Zoom meeting
- 5) Download **Canvas App** for students.

Get to know you

1) Simplify $(3 \cdot 5 - 10)^2 = (15 - 10)^2$
 $= 5^2$
 $= \boxed{25}$

1) 25

2) Evaluate $x^3 - 4x^2y$ for $x = -2$ and $y = 3$.

$$x^3 - 4x^2y = (-2)^3 - 4(-2)^2(3)$$

$$= -8 - 4(4)(3)$$

$$= -8 - 48 = \boxed{-56}$$

2) -56

3) Solve

$$2x - 8 = -2x + 10$$

$$2x + 2x = 10 + 8$$

$$4x = 18$$

$$x = \frac{18}{4}$$

$$x = \frac{9}{2} \quad x = 4.5$$

Solution Set

$$3) \left\{ \frac{9}{2} \right\}$$

4) Simplify:

$$4(x - 2) - 2(2x - 4)$$

Hint: Distribute

$$= 4x - 8 - 4x + 8$$

$$= -8 + 8$$

$$= 0$$

$$4) \underline{0}$$

Do not use \emptyset for Zero.5) Evaluate $b^2 - 4ac$ for

$$a = -1, b = 4, c = -4$$

$$b^2 - 4ac = (4)^2 - 4(-1)(-4)$$

$$= 16 - 4(-1)(-4)$$

$$= 16 - 16 = 0$$

$$5) \underline{0}$$

Don't Use \emptyset for Zero.

6) Simplify:

$$\frac{2}{3} - \frac{1}{2}$$

$$= \frac{2 \cdot 2}{3 \cdot 2} - \frac{1 \cdot 3}{2 \cdot 3}$$

$$= \frac{4}{6} - \frac{3}{6} = \frac{4-3}{6} = \frac{1}{6}$$

$$6) \underline{\frac{1}{6}}$$

7) Simplify: $x^3 \cdot x^5$
 $= x^{3+5} = \boxed{x^8}$

Hint:
 $x^m \cdot x^n = x^{m+n}$

8) Simplify: $\frac{x^{12}}{x^5} = x^{12-5} = \boxed{x^7}$

$\frac{x^m}{x^n} = x^{m-n}$

9) Simplify: $(x^5)^2 = x^{5 \cdot 2} = \boxed{x^{10}}$

$(x^m)^n = x^{m \cdot n}$

Solve and graph on the number line System:

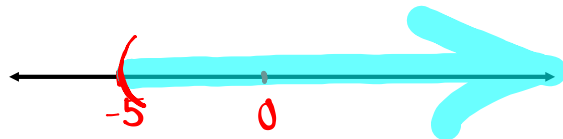
$$2x + 8 > -2$$

$$2x > -2 - 8$$

$$2x > -10$$

$$\frac{2}{2}x > \frac{-10}{2}$$

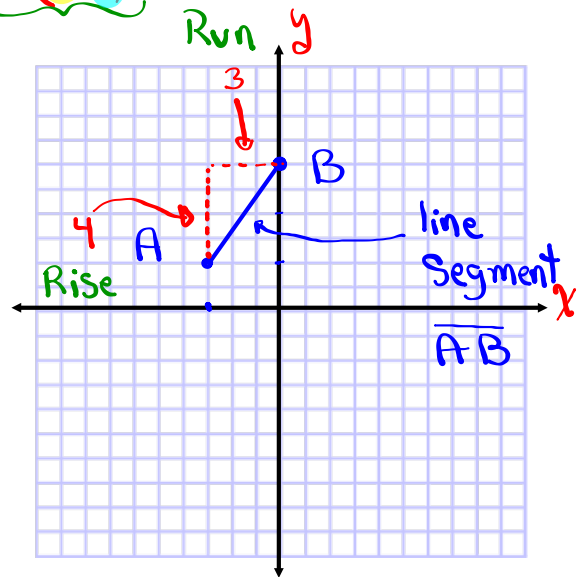
$$\boxed{x > -5}$$



Plot $A(-3, 2)$ and $B(0, 6)$
 ordered Pairs
 (x, y)

$$m = \frac{\text{Rise}}{\text{Run}}$$

$$\text{Slope} = \frac{\text{Rise}}{\text{Run}} = \frac{4}{3}$$



Plot $A(-4, 0)$ and $B(3, -2)$, then

draw \overline{AB} .

$$m = \frac{\text{Rise}}{\text{Run}} = \frac{-2}{7}$$

