20 in 20: Week 4 – July 23rd

Ex. 1 Simplify:

$-8-10-20$

-38

Ex. 2 Simplify:

$6-56-(-15)$

$-44+15$ $\quad -29$

Ex. 3 Simplify:

$\frac{3}{7} \cdot 10 = \frac{30}{7}$

Ex. 4 Simplify:

$\frac{5}{3} \div \frac{10}{7}$ $\quad \frac{15}{3} \cdot \frac{7}{10_2} = \frac{7}{6}$

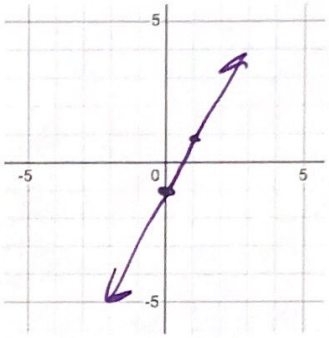
Ex. 5 Simplify:

$(5+3)^2-18$

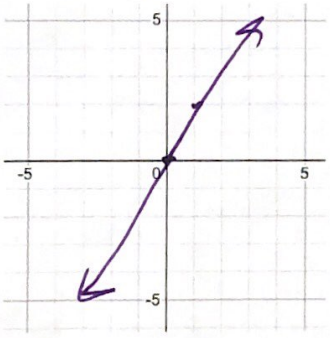
$64-18$

46

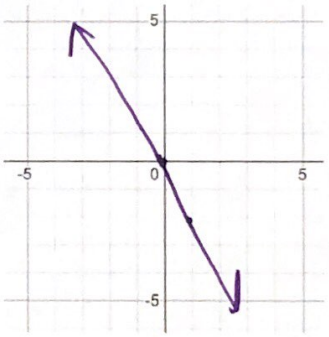
Ex. 6 Graph: $y=2x-1$



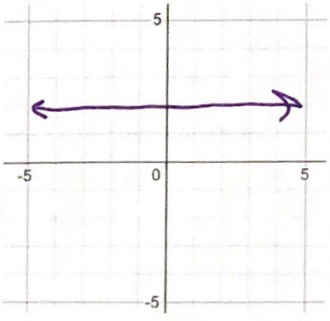
Ex. 7 Graph: $y=2x$



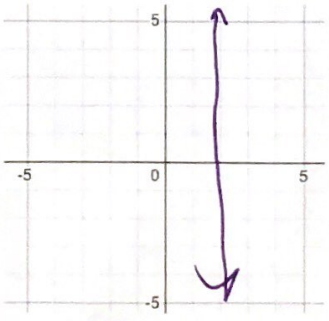
Ex. 8 Graph: $y=-2x$



Ex. 9 Graph: $y=2$



Ex. 10 Graph: $x=2$



Ex. 11 Perform the operation. Write your answer in scientific notation.

$(3\times10^5)+(6\times10^4)$

$(3\times10^5)+(.6\times10^5)$

3.6×10^5

Ex. 12 Perform the operation. Write your answer in scientific notation.

$(2\times10^7)^2$

4×10^{14}

Ex. 13 Perform the operation. Write your answer in scientific notation.

$\frac{3.5\times10^8}{7.0\times10^{-2}}$

$.5\times10^{10}$

5×10^9

Ex. 14 Solve the equation.

$-3+4x=-47$

$4x=-44$

$x=-11$

Ex. 15 Solve the equation.

$2-5x=27$

$-5x=25$

$x=-5$

Ex. 16 Simplify the expression.

$5x+3x^2-8+2x-7x^2+5$

$-4x^2+7x-3$

Ex. 17 Simplify the expression.

$3x(5x-2)+4x(8x+1)$

$15x^2-6x+32x^2+4x$

$47x^2-2x$

Ex. 18 Two angles of a triangle are 25° and 80°. What is the third angle?

$80+25=105$

$180-105=75°$

Ex. 19 Can these sides be the side of a triangle? Why or why not.

2, 5, 8

NO!

$2+5\not>8$

Ex. 20 Mr. X has 27 ounces of juice. He pours equal amounts for each of his 3 friends and has 6 ounces left for himself. Set up an equation to represent this and solve for the amount of juice given to each friend.

$6+3x=27$

$3x=21$

$x=7$ oz