**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Per:\_\_\_\_\_\_\_\_\_\_\_\_**

**Midterm Review Warm Up 2**

**Section 1.6**



**Ex:** Write a rule for the function represented by the graph:

Start by setting up an *x*/*y* table:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *x* | −3 | 0 | 3 | 6 |
| *y* | 7 | 5 | 3 | 1 |

Use the *x*/*y* table to find Δ*y* and Δ*x*, then set up the fraction

$\frac{∆y}{∆x}$ to find the coefficient of *x* in the function.

Δ*y* = −2, Δ*x* = 3, so the fraction is $-\frac{2}{3}$ which means the function starts as

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

Now check the first input of −3 and see if when you put that into the function the correct output comes out. If you multiply $-\frac{2}{3}(-3)$ you would get 2 and you *want*  to get 7, so to adjust, add 5 to the function making it:

*y* = $-\frac{2}{3}x+5$ check to see that it works for all other inputs

**Section 2.2 Section 2.5**

**Ex:** Add $-4\frac{1}{3}+3\frac{3}{4}$ **Ex:** Simplify: 4(3 – 2*x*) – 3(*x* – 6)

First change to improper, then find common \*Helpful hint is to rewrite subtraction as adding a

Denominator, then add numerators, keep negative before distributing.

denominator

 4(3 + −2*x*) + −3(*x* + −6)

$-\frac{13}{3}+\frac{15}{4}$ 12 + −8*x* + −3*x* + 18

$\frac{-52}{12}+\frac{45}{12}$ −11*x* + 30

$-\frac{7}{12}$

**Section 2.7**

**Ex:** Order from least to greatest:

$\sqrt{1}, -\sqrt{8}, \frac{17}{4}, -4.8, -\frac{6}{7}$ $-4.8, -\sqrt{8}, -\frac{6}{7}, \sqrt{1}, \frac{17}{4}$