TRS 92: Equivalent forms and Average Rates of Change

1. Choose all of the equivalent expressions of $\frac{2}{5}x$.

$\frac{2x}{5}$ $\frac{2}{5x}$ $0.4x$ $\frac{0.4}{x}$ $2x * \frac{1}{5}$

2. Which of the following expressions are equivalent to $\frac{1}{2}(x+8)$? Circle all the possibilities.

$\frac{x+8}{2}$ $\frac{1}{2(x+8)}$ $\frac{x}{2}+\frac{8}{2}$ $\frac{1}{2}+\frac{1}{(x+8)}$ $\frac{1}{2}x+8$

For #3-4, refer back to Day 24 Activity #10.

3. Sherri calculated the average rate of change between the two points and got a negative result. She knows it's not correct, but she's not sure what she did wrong. Her work is shown below. Explain her error.

$$\frac{-3-(-8)}{-2-6}=\frac{5}{-8}$$

4. Gordy's work to calculate the average rate of change is on the left below. Sandy's work is on the right. Who is correct? Justify your answer with a detailed explanation.

Gordy: $\frac{-2-6}{-8-(-3)}$ Sandy: $\frac{-6-(-2)}{-3-(-8)}$

Writing Prompt #3

Your explanation should either be typed or written neatly on separate, lined paper or the back of this sheet. Vocabulary that should be used, but is not limited to, includes: numerator, denominator, and subtract. Be sure to show your mathematical work.

Given (-3, 5) and (5,-20), fully explain how to find the average rate of change between these points.