

Quiz 2

Total Points possible: 10

Math 12: Spring 2025

Name: key

Instructions: Each question is worth 3 points but the last question. Question 3 is worth 1 point. **Show all your work in order to receive credit.**

Problem 1. Simplify the fractions

(a) $-\frac{5}{4} + 1$ note $1 = \frac{1}{1}$ so

$= -\frac{5}{4} + \frac{1}{1}$ want the bottoms to be the same

$= -\frac{5}{4} + \frac{1}{1} \cdot \frac{4}{4}$ multiply by 1. Notice $\frac{4}{4} = 1$,

$= -\frac{5}{4} + \frac{4}{4}$

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

(b) $\frac{2}{3} - \frac{11}{2} \div \frac{4}{7}$ change to "multiplication" flip fraction.

keep multiplication/division
Do fraction first PEMDAS

$= \frac{2}{3} - \frac{11}{2} \cdot \frac{7}{4}$ multiply straight across

$= \frac{2}{3} - \frac{11 \cdot 7}{2 \cdot 4}$

$= \frac{2}{3} - \frac{77}{8}$ get common denominator

$= \frac{2}{3} \cdot \frac{8}{8} - \frac{77}{8} \cdot \frac{3}{3}$

$= \frac{16}{24} - \frac{231}{24}$ bottoms are the same, now you can add the top. Do not add numbers in the denominator.

$= \frac{16 - 231}{24}$

$= -\frac{215}{24}$

Problem 2. Solve for the variable x .

$$\begin{array}{rcl} y = 7x - 1003 & & \text{add 1003 to both sides} \\ +1003 & +1003 & \end{array}$$

$$y + 1003 = 7x \quad \text{Divide both sides by 7}$$

$$\frac{y + 1003}{7} = \frac{7x}{7}$$

$$\frac{y + 1003}{7} = x$$

Problem 3. Out of a 1 to 5. 5 being the highest, how confident are you in this quiz? Did you do any preparation for this quiz? If so how long did you spend.



mr. porch