

STUDENT MATERIALS

PART 1 – DATA ANALYSIS PROMPT

Using a Gas Card to Buy Gas

You and your family are going on a trip and see a gas station where gas costs \$4.00 per gallon. You stop to put gas in the car. You spend \$40 to fill the gas tank. How many gallons of gas did you buy?

Write an addition equation, a multiplication equation, and a division equation in the places below to determine how many gallons of gas your high school brother pumped into the car's tank.

After writing the three equations, select the best one for determining the number of gallons pumped into the tank. Circle that equation.

Finally, support in writing why you chose that operation. Which equation is the most efficient (quickest and easiest) for finding the number of gallons of gas. Explain why you chose that equation.

Equation 1 – Addition

Handwritten work for Equation 1:

$4.00 \times 10 = 40$ (written vertically)

$4 + 4 + 4 + 4 + 4 = 20$

$20 + 20 = 40$ (written vertically)

10 gallons

Equation 2 – Multiplication

Handwritten work for Equation 2:

$4 \times 10 = 40$

Equation 3 – Division

Handwritten work for Equation 3:

$4 \div 10 = 40$ (circled)

This was Best

In Part 2, on page 6, you will explain why the equation you circled is best? Be sure to explain mathematically why you chose that equation in the space on page 6.

PART 2 – TESTING PROCESS QUESTIONS

1. Explain your thinking as you went about solving the word problem through the three operational equations (addition, multiplication, and division) in Part 1. Include the mathematical processes you used for each equation.

I did the math and I just solved it in a way to show my thinking like I used what I know to do my thinking like when I did $4 \div 10 = 40$ because 10, 20, 30, 40. I was thinking what I learned so far so I use it.

2. Which equation is the most efficient (quickest and easiest) for finding the number of gallons of gas? Explain why you chose that equation.

I think it was division because I know what $4 \div 10 = 40$ it equals so that's what I think was the easiest.

PART 3 – REFLECTION QUESTIONS

After you have responded to the first two parts on this assessment, please complete the reflection questions below.

1. Do you think you got one of the correct answers? Explain why or why not?

Yes, because I showed all of my thinking of what I learned so I used it and I feel like I got it right.

2. Which equation was hardest to write? How did you figure it out?

Addition because we had to try to add up $4-40$ I thought it was really hard.