



Grade 6 SNAP Operations

- **Estimate – Justify your thinking**

Operations Rubric: Proficient

- Estimation/mental math strategies and justification are reasonable

$80 \div 4 = 20$
 $88 \div 4 = 22$
83.62 is close
to 80 and
very easy to
divide

$47.35 \div 5$
 \downarrow
 $50 \div 5 = 10$
I rounded 47.35 to
a close number that
was easy to divide
by 5, then I divided.

45.34 is close
45.45 \div 5 is 9
so my answer
should be close
to 9.

Goal:

- Manipulate the dividend through rounding or finding a close number that divides easily
- Divide the new numbers to find a reasonable estimate
- Explain/justify your strategy in words or by clearly showing rounding and division (e.g. $17.89 \rightarrow 18$ and $18 \div 3 = 6$)

Note:

- An estimate alone without any justification is not proficient, even if the number is reasonable
- Estimation can be a challenging skill because it requires strategy selection, rounding, and mental math skills. You can find instructional ideas and a list of effective estimation strategies to teach students in [Reasoning and Analyzing Resources](#)



Grade 6 SNAP Operations

- Represent with a sketch or drawing
- Explain your sketch

Operations Rubric: Proficient

- Uses grade appropriate strategies to correctly solve the problem and show understanding

47.35

Explain your sketch:
My sketch shows 47.35 being divided into 5 equal parts.

Represent - with a sketch or drawing:

45.34

Explain your sketch:
I drew 45.34 and divided it between 5 people.

Represent - with a sketch or drawing:

45.34

Explain your sketch:
20 = 2, 1 = 1, 0.0 = 0.1. I divided 45.34 into 5 equal parts.

Goal:

- Use a drawing to demonstrate an understanding of division within the context of the provided numbers (i.e. the dividend is our starting total and the divisor is the number of equal groups)

Notes:

- Students do not need to show the quotients in their drawings
- Simply replacing the numbers in the equation with base ten does not show division
- You can find more examples in [Communicating and Representing Resources](#)



Grade 6 SNAP Operations

- **Calculate**

Operations Rubric: Proficient

- Uses grade appropriate strategies to correctly solve the problem and show understanding

Calculate:

$$\begin{array}{r} 9.068 \\ 5 \overline{) 45.340} \\ \underline{-45} \\ 034 \\ \underline{-30} \\ 40 \\ \underline{-40} \\ 0 \end{array}$$

$$\begin{array}{r} 9.47 \\ 5 \overline{) 47.35} \\ \underline{-45} \\ 235 \\ \underline{-20} \\ 35 \\ \underline{-35} \\ 0 \end{array}$$

$$\begin{array}{r} 20.905 \\ 4 \overline{) 83.620} \\ \underline{-80} \\ 362 \\ \underline{-36} \\ 20 \\ \underline{-20} \\ 0 \end{array}$$

Goal:

- Select an appropriate division strategy, carry out the steps in the operation, and clearly indicate the response (the quotient, in this case)

Notes:

- The standard algorithm (long division) is one possible strategy, but there are others that are equally acceptable (e.g. Partial Quotient, Short Division, Repeated Subtraction etc.)
- An “answer” alone without work is not proficient
- You can find an instructional video and computation strategies in [Understanding and Solving Resources](#)



Grade 6 SNAP Operations

- Write a real-life example or word problem

Operations Rubric: Proficient

- Real life example and connections to mathematical concepts are evident
- The example shows a clear connection to the operation

Real Life Example or Word Problem: Denise has \$45.34 she has 5 kids and she splits the money equally she gives each kid \$9.68

Real Life Example or Word Problem: 5 friends all ran the exact same distance and their total distance was 47.35 km. How far did each of them run? (They each ran 9.47 km)

Real Life Example or Word Problem: Rob the farmer had 83.62 pounds of grain and he gave the same amount to each of his horses & there were 4 How much did each horse get

Goal:

- Demonstrate an understanding of division using a real-life situation.

Notes:

- Some responses include a real-life example that uses the numbers in the operation but does not describe division. You can learn great deal about your students' understanding of division through their responses in this section.
- Picture books, collaborative problem solving (e.g. using a "Building Thinking Classrooms" structure), and field trip experiences are great ways to help students make real-life connections to division concepts



Grade 6 SNAP Operations

- **Reflect**

Number Sense Rubric: Proficient

- With sentence frames and structure, can proficiently reflect on their learning

The sketch was easy because division is simple to draw. **Reflect:** I really had to concentrate on the calculate section to keep everything organized. My goal is to learn all my times tables so I can get faster with calculating.

The calculate was hard. **Reflect:** I got stuck then I remembered to put a 0 in the thousandths place.

I couldn't remember where to put the decimal in the answer but my estimate helped me. **Reflect:**

Goal:

- Identify and articulate strengths, stretches, and/or goals related to the content and competencies explored in the SNAP

Notes:

- It's important to model and teach effective reflection skills, or students will often default to "It was all easy" or "It was all hard"
- Clear expectations like, "Give me one strength, one stretch, and one goal" will lead to more insightful, reflective responses
- You can find reflection sentence stems in [Connecting and Reflecting Resources](#)