More Decimal and Fraction Operations: End-of-Unit Assessment

1. Select **all** expressions that represent the number of millimeters in a kilometer.

   A. 10^3

   B. 10^5

   C. 10^6

   D. 1,000

   E. 100,000

   F. 1,000,000

2. Which fraction is equivalent to $\frac{7}{10}$?

   A. $\frac{7\times10}{9\times10}$

   B. $\frac{10\times10}{10\times7}$

   C. $\frac{7\times41}{10\times41}$

   D. $\frac{7+10}{10+10}$

3. Select **all** expressions with a value larger than 1.

A. $\frac{4}{5} + \frac{1}{6}$

B. $\frac{3}{4} + \frac{1}{3}$

C. $\frac{7}{5} - \frac{1}{10}$

D. $2\frac{1}{8} - 1\frac{1}{7}$

E. $\frac{5}{4} + \frac{1}{9}$

F. $1\frac{1}{2} - \frac{3}{5}$

4. Find the value of each expression.

a. $\frac{7}{4} + \frac{3}{5}$

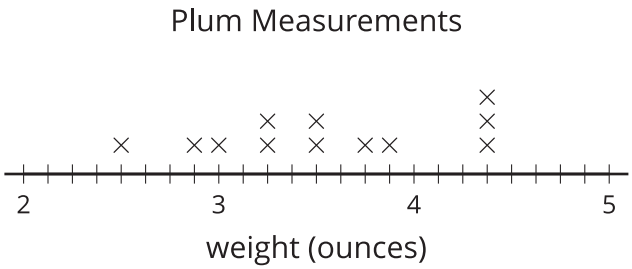
b. $\frac{3}{4} - \frac{2}{5}$

c. $6\frac{1}{5} - 4\frac{5}{6}$

5. Han's backpack weighs $\frac{5}{4}$ as much as Lin's backpack. Clare's backpack weighs $\frac{2}{3}$ as much as Lin's backpack. Whose backpack weighs the most? Whose backpack weighs the least? Explain or show how you know.

6. Elena drinks 9 glasses of water during the day. Each glass is 250 milliliters. How many liters of water does Elena drink during the day? Explain or show your reasoning.

7. Use the line plot to answer the questions.



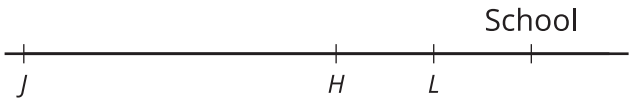
a. How much heavier is the heaviest plum than the lightest plum? Explain or show your reasoning.

b. How many plums were weighed?

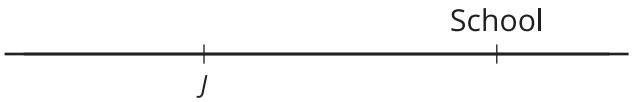
c. Noah says that half the plums weigh more than $3\frac{1}{2}$ ounces. Do you agree with Noah? Explain your reasoning.

8. Jada lives $1\frac{3}{10}$ miles from school. Han lives $\frac{1}{2}$ mile farther from school than Jada. Lin lives $\frac{1}{4}$ mile closer to school than Jada.

   a. Jada drew this diagram to represent the situation. Explain why the diagram is not accurate.



   b. Locate on the diagram an estimate of where you think Lin's home and Han's home might be.



   c. How far do Han and Lin live from the school? Explain or show reasoning.

   d. Does your diagram of how far Han and Lin are from the school agree with your calculations? Explain or show your reasoning.