

Extending Operations to Fractions: End-of-Unit Assessment

1. Select **all** the expressions equivalent to $\frac{5}{4}$.

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

B. $\frac{2}{4} + \frac{1}{4} + \frac{2}{4}$

C. $\frac{3}{4} + \frac{1}{4} + \frac{2}{4}$

D. $1 + \frac{1}{4}$

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

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

A. $\frac{1}{3} + \frac{1}{3} + \frac{1}{3}$

B. $\frac{2}{4} + \frac{1}{4} + \frac{2}{4}$

C. $2\frac{3}{12} - 1\frac{5}{12}$

D. $3 \times \frac{2}{5}$

E. $9 \times \frac{1}{10}$

3. Select **all** the expressions that are equivalent to $\frac{8}{12}$.

A. $8 \times \frac{1}{12}$

B. $2 \times \frac{4}{12}$

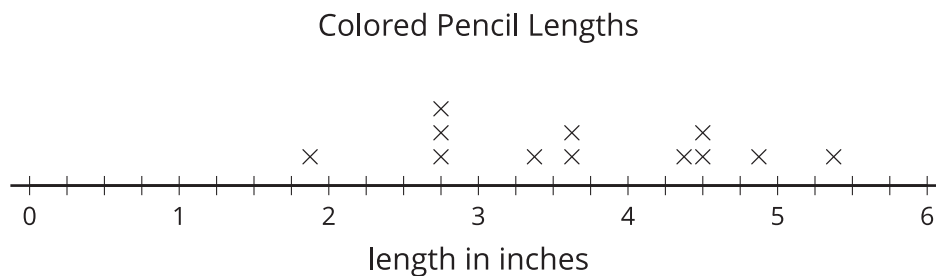
C. $4 \times \frac{4}{12}$

D. $4 \times 2 \times \frac{1}{12}$

E. $12 \times \frac{1}{8}$

4. Jada needs 2 pounds of walnuts for a trail mix. She has 3 packages of walnuts that each weigh $\frac{3}{4}$ pound. Does Jada have enough walnuts to make the trail mix? Explain or show your reasoning.

5. The line plot shows the lengths of some colored pencils.



- a. What is the difference between the longest pencil and the shortest pencil shown in this line plot? Show your reasoning.
- b. How many pencils measured $4\frac{1}{2}$ inches or more?
- c. Two more colored pencils measure $2\frac{1}{4}$ inches and $5\frac{1}{8}$ inches. Plot these measurements on the line plot.

6. Find the value of each expression.

a. $\frac{5}{6} + \frac{2}{6} + \frac{3}{6}$

b. $3 - \frac{7}{8}$

c. $4\frac{3}{5} + 3\frac{4}{5}$

d. $8 - \frac{8}{10}$

e. $5 \times \frac{3}{8}$

7. Find the value of each expression.

a. $\frac{7}{100} + \frac{8}{100} + \frac{1}{10}$

b. $\frac{3}{10} + \frac{17}{100} + \frac{2}{10}$

c. $\frac{14}{100} + \frac{5}{10} + \frac{26}{100}$

8. Noah's favorite song is $5\frac{1}{6}$ minutes long. Jada's favorite song is $2\frac{5}{6}$ minutes long.

a. How many minutes does it take to listen to Noah's favorite song and Jada's favorite song? Explain or show your reasoning.

b. How many minutes longer is Noah's favorite song than Jada's favorite song? Explain or show your reasoning.

c. Jada says she can listen to her song two times in the same amount of time it takes Noah to listen to his song once. Do you agree with Jada? Explain or show your reasoning.