Enrich

Operations with Fractions and Decimals

Sometimes an operation involves various forms of numbers. To perform the operation more easily, you need to express all the numbers in the same form. Here are two examples.

$$5 \div 0.\overline{3} = 5 \div \frac{1}{3}$$
 Express the decimal as a fraction.

$$5 \div 0.\overline{3} = 5 \div \frac{1}{3}$$
 Express the decimal as a fraction. $\frac{3}{4} + 0.115 = 0.75 + 0.115$ Express the fraction as a decimal. $= 5 \times \frac{3}{1}$

Perform the operation. Express the answer as a whole number, fraction, or mixed number in simplest form.

1.
$$5 \div 0.25$$

2.
$$9 \div 0.\overline{6}$$

3.
$$0.125 \times \frac{4}{11}$$

4.
$$1\frac{1}{5} \times 0.\overline{3}$$

5.
$$0.8 - \frac{3}{5}$$

6.
$$\frac{13}{8}$$
 - 0.875

Perform the operation. Express the answer as a whole number or decimal.

7.
$$1 \div 0.4$$

9.
$$0.001 \times \frac{3}{5}$$

10.
$$6.39 + \frac{7}{8}$$

11.
$$9.1 - \frac{1}{4}$$

12.
$$38 + 0.709 + \frac{2}{5}$$

- 13. Kevin is making one recipe that calls for $1\frac{1}{4}$ pounds of hamburger and another that calls for 2 pounds. In the store, he finds a family pack of hamburger that is labeled 3.75 pounds. Is this more or less than he needs? How much more or less?
- 14. Daneesha needs $1\frac{1}{2}$ yards of material to make a jacket and $1\frac{3}{4}$ yards of material to make a skirt. The material costs \$7.50 per yard. What is the total cost of the material for the skirt and jacket? Round your answer to the nearest cent.