school nova™

1. Peter spent 15% of his money and 1.5 dollars on a doughnut and $\frac{3}{5}$ of his money and 30 cents on ice-cream. How much money did he have?

2. Write an expression to find 15% of a number a. Calculate 15% of the following numbers: 1540, 220, and 10.

3. Write an expression to find a number, if 4% of it is equal to b. Find the numbers for which 4% is equal to 8, 12, and 55.

4. Compare by representing fractions as decimals:

   a. $\frac{1}{2}$ and 0.55;   b. $\frac{3}{25}$ and 0.15;   c. $\frac{1}{8}$ and 0.12;

   d. 0.75 and $\frac{3}{4}$;   e. $\frac{7}{20}$ and 0.35;   f. $\frac{1}{125}$ and 0.01;

5. Compare by representing decimals as fractions:

   a. $\frac{1}{6}$ and 0.2;   b. $\frac{1}{3}$ and 0.3;   c. $\frac{2}{3}$ and 0.75;

   d. 0.1 and $\frac{1}{9}$;   e. $\frac{5}{7}$ and 0.7;   f. 0.8 and $\frac{5}{6}$;

6. Evaluate:

   a. $4 \cdot 0.5$;   b. $4 : 0.5$;   c. $4 \cdot 5$;   d. $4 : 5$;

   a. $\frac{5}{8} \cdot 0.5$;   b. $\frac{5}{8} : 0.5$;   c. $\frac{5}{8} \cdot 5$;   d. $\frac{5}{8} : 5$;

7. In the following problems a is natural number, numbers n, m also are natural numbers and $n > m$. Compare:

    a. a and $a \cdot \dfrac{m}{n}$;   b. a and $a : \dfrac{m}{n}$;

    c. a and $a \cdot \dfrac{n}{m}$;   d. a and $a : \dfrac{n}{m}$

8. Find the weight of each shape, if the weight of pentagon is 40.