

Math 5b, homework 13.



1. Evaluate (answer is 360):

$$\frac{1.75:1.25 + 1.4 \cdot 1\frac{4}{7} + (2.88 + 1\frac{3}{25}) \cdot 0.1}{1:[(2.5:\frac{5}{18} - 0.9):0.09]}$$

2. The owner has two dogs. The big one weighs 9 kg, and the small one - 3 kg. He divided a bag of food between them in a ratio equal to the ratio of their masses. What part of the food went to the small dog?
3. 3 tons of potatoes were brought to the store. On the first day, 30% of all potatoes were sold, and on the second day - 45%. On which day were more potatoes sold and how many times more? Are there any extra data in the problem?
4. Represent as a fraction:
- a. 0.345; b. $0.\overline{345}$, c. $0.3\overline{45}$, d. $0.34\overline{5}$
5. Compare:
- a. 2^3 and 3^2 ; b. 3^6 and 6^3 ; c. $(-2)^4$ and 4^2 ; d. 5^4 and $(-4)^5$
e. $(-2)^3$ and 3^{-2} ; f. $(-4)^{-3}$ and $(-3)^{-4}$
g. $(-5)^{-6}$ and $(-6)^{-5}$; h. $(-2)^{-6}$ and $(-6)^{-2}$