Math 4 Classwork #12

1. Remove parentheses and simplify:

a). $(x + 2) : 3 + \left(\frac{1}{6}x + \frac{1}{12}\right) \cdot 4 =$ _____

b). $\left(\frac{1}{2} - x\right) \cdot 2 + \left(2x + \frac{1}{6}\right) \cdot 3 =$ _____

2. Calculate:

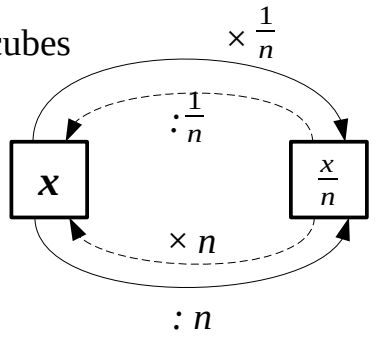
$2 \times 4 =$ $2 \times (-4) =$ $(-2) \times 4 =$ $(-2) \times (-4) =$

$8 : 4 =$ $(-8) : (-4) =$ $(-8) : 4 =$ $8 : (-4) =$

3. Solve the equations:

$|x + 4| = 2$ $|4x + 4| = 2$ $\left|\frac{1}{3}x - 2\right| = 4$ $\left|\frac{1}{3}x - 2\right| = -4$

4. Analyze relationships between dm, cm, mm, and their squares and cubes



5. Calculate:

$4 \times 6 =$

$\frac{1}{4} \times 6 =$

$4 : 6 =$

$\frac{1}{4} : 6 =$

$4 \times \frac{1}{6} =$

$\frac{1}{4} \times \frac{1}{6} =$

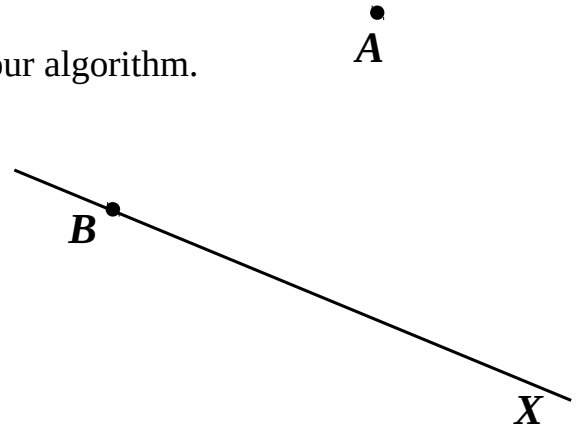
$4 : \frac{1}{6} =$

$\frac{1}{4} : \frac{1}{6} =$

6. ⅔ of marbles in a bag are red, ½ **of the rest of them** are blue, and the remaining marbles are green. What fraction of the marbles are green?

7. A peasant was selling eggs. The first customer came and bought ½ of all the eggs plus another egg. The second customer came and bought ½ of the remaining eggs plus another egg. The third customer came and bought the last remaining egg. How many eggs did the peasant bring to the market?

8. Plot a rhombus ***ABCD*** if point ***D*** ∈ ***BX***. Record your algorithm.



9. Plot line ***m*** that is perpendicular to the line ***n*** and goes through point ***K***.