

**Complete in this handout:****1. Calculate:**

$$\frac{1}{2} + \frac{1}{3} =$$

$$\frac{1}{2} - \frac{1}{3} =$$

$$\frac{1}{2} \cdot \frac{1}{3} =$$

$$\frac{1}{2} : \frac{1}{3} =$$

$$\frac{2}{3} + \frac{3}{4} =$$

$$\frac{2}{3} - \frac{3}{4} =$$

$$\frac{2}{3} \cdot \frac{3}{4} =$$

$$\frac{2}{3} : \frac{3}{4} =$$

$$\frac{5}{12} + \frac{3}{16} =$$

$$\frac{5}{12} - \frac{3}{16} =$$

$$\frac{5}{12} \cdot \frac{3}{16} =$$

$$\frac{5}{12} : \frac{3}{16} =$$

$$\frac{1}{4} + \frac{3}{8} =$$

$$\frac{1}{4} - \frac{3}{8} =$$

$$\frac{1}{4} \cdot \frac{3}{8} =$$

$$\frac{1}{4} : \frac{3}{8} =$$

**2. Expand decimal fractions:**

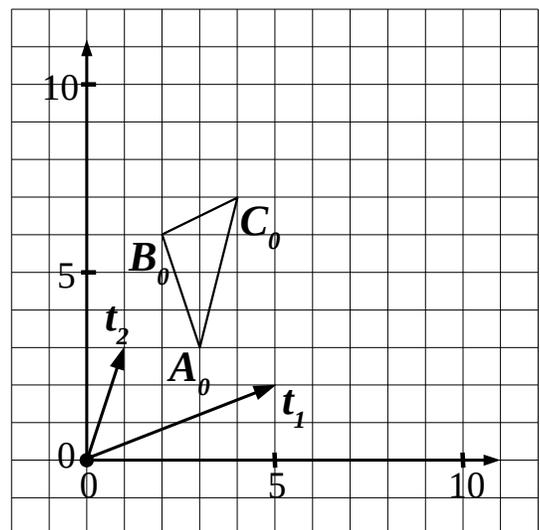
a).  $1.13 =$

b).  $1.03 =$

c).  $0.12 =$

d).  $0.012 =$

**3. Move  $\triangle A_0B_0C_0$  as indicated by arrow  $t_1$  to produce  $\triangle A_1B_1C_1$ . Move  $\triangle A_1B_1C_1$  as indicated by arrow  $t_2$  to produce  $\triangle A_2B_2C_2$ .**



4. Solve the joint action problems; explain each step in your solution.

a). A pipe can fill up a swimming pool in 3 hours. Another pipe can drain the pool in 6 hours. How long will it take to fill the pool with both pipes open?

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b). Cities **A** and **B** are 160 km away from each other. At noon a bus leaves from each city bound to another one. One bus moves 45 km/h. Another bus moves 35 km/h. When will the buses meet?

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**Complete in your notebook:**

5. Show that ...

a) ...  $(12x + 6) : \frac{3}{4} - (8 + 16x) \cdot \frac{3}{4} = 4x + 2$

b) ...  $(3x - 9) \cdot \frac{2}{5} - (x - 3) : \frac{5}{6} = 0$

6. Solve the equations below.

$$7 - x : \frac{4}{3} = 4$$

$$\frac{2}{7}x + 8 = 6$$

$$|y - 4| = 3$$

**Answers:**

$$x = 4$$

$$x = -7$$

$$\{1, 7\}$$