Math 4 Homework #10

Solve in this handout

1. Find and present in the ***simplest form*** …

$\frac{1}{6}$ *of* $\frac{2}{3}$ is

$\frac{5}{6}$ *of* $\frac{2}{3}$ is

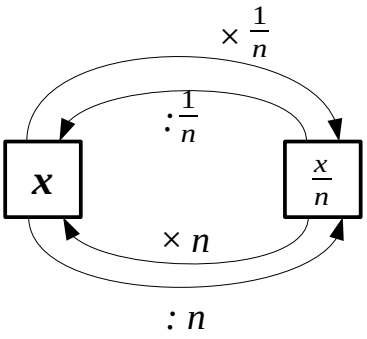
$\frac{1}{8}$ *of* $\frac{1}{10}x$ is

$\frac{3}{8}$ *of* $\frac{1}{10}x$

2. Calculate:

$|3| =$ $|-3| =$ $|1-4| =$

$|1-7| =$ $|2+(-9)| =$



3. Calculate:

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

$\frac{1}{6} \times \frac{1}{3} =$

$\frac{1}{12} \times \frac{1}{4} =$

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

$\frac{1}{6} : \frac{1}{3} =$

$\frac{1}{12} : \frac{1}{4} =$

$3 \times \frac{1}{4} =$

$\frac{1}{18} : \frac{1}{6} =$

$\frac{1}{12} : \frac{1}{6} =$

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

$\frac{1}{18} \times \frac{1}{6} =$

$\frac{1}{12} \times \frac{1}{6} =$

4. Calculate:

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

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

Math 4 Homework #10

Solve in your notebook

5. Show that …

a). $(4 + 8\boldsymbol{x}) : 4 + (\boldsymbol{y} - \boldsymbol{x}) \cdot 2 = 1 + 2\boldsymbol{y}$

b). $\left(\frac{1}{4} + \frac{1}{6}\,\boldsymbol{x}\right) \cdot 12 + (6 - 6\boldsymbol{x}) : 3 = 5$

6. Make appropriate drawings to solve the equations:

a). $\frac{2}{3}x = \frac{1}{6}$ b). $\frac{1}{3}x - \frac{1}{4} = \frac{1}{2}$ c). $\frac{5}{6} - \frac{y}{4} = \frac{1}{3}$

7. Make appropriate ***drawings*** to solve the equations. Indicate which equations have an empty set of solutions.

a). $|\boldsymbol{y}| = 4$ b). $|\boldsymbol{y}| = -4$

c). $|\boldsymbol{x}| = -5$ d). $|\boldsymbol{x} - 1| = 2$

8. Make appropriate drawings to solve the equations.

a). $12\boldsymbol{x} - 4 = 2$

b).* $\frac{1}{2} - 6 : \boldsymbol{x} = \frac{1}{4}$ /This equation might require a drawing for each step

Answers:

6a: $x=\frac{1}{4}$ 6b: $x=\frac{9}{4}=2\frac{1}{4}$ 6c: $y=2$

7a: {–4, 4} 7b: ∅ 7c: ∅ 7d: {–1, 3}

8a: $x=\frac{1}{2}$ 8b: $x=24$

Math 4 Homework #10

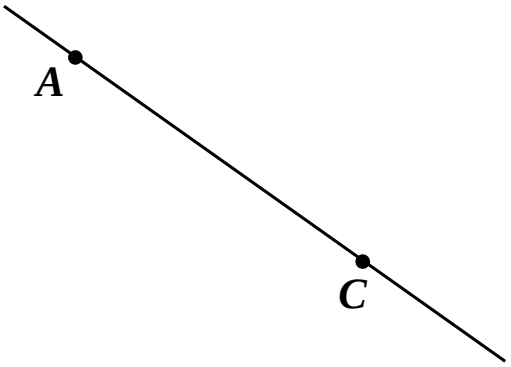
9. Plot rhombus ***ABCD*** each side of which is 5 cm long. Record your algorithm

_____

_____

_____

_____



10. Follow the instructions below:

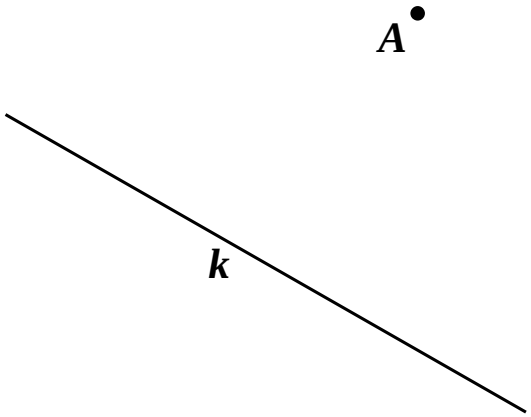
1. Plot ***w*** = Circ(***A***, 5 cm)

2. Find {***B***, ***D***} = ***w*** ∩ ***k***

3. Plot ***h*** = Circ(***B***, 5 cm)

4. Plot ***g*** = Circ(***D***, 5 cm)

5. Find ***C*** ∈ ***h*** ∩ ***g***



What shape is ***ABCD***?