Math 3.   Homework 24

1. Write down a number sentence and find its value:

a) Divide the sum of 85 and 125 by 5:

_____

b) Subtract the sum of 86 and 37 from 413:

_____

c) Multiply two sums - sum of 123 and 47 and sum of 31 and 9:

_____

2. Write suitable signs from +, −, ÷, × OR ( ) into the following number sentences to make all equalities correct.

Example: $4 + 4 - 4 - 4 = 0$

a) 4   4   4   4 = 1   b) 4   4   4   4 = 2   c) 4   4   4   4 = 3

3. Solve the problems, use Venn diagrams if needed:

a) 5 students in 5th grade class study Spanish only, 8 kids in class study French only. Every student in class studies at least one foreign language. How many people study 2 foreign languages if there 22 kids in that class.

_____

b) The gardener decided to plant some trees. Twenty trees were supposed to be planted in full sun, ten trees - in the shade, and 15 trees could be planted in partial sun/shade areas of the garden. How many trees altogether the gardener planted?

_____

Review - Fractions

4.

Victoria baked a pie. She cut it into eight pieces and ate two herself. The rest of the pie, she divided equally between her sister, their mom, and dad. What part of the cake Victoria ate. Who ate the larger part? _____

5. Insert the missing fraction:

a) _____ $+ \dfrac{1}{3} = 1$　　　　b) $\dfrac{2}{3} +$ _____ $=$　　　　c) $\dfrac{5}{8} +$ _____ $= 1$

d) _____ $+ \dfrac{9}{10} = 1$　　e) _____ $- \dfrac{2}{8} = \dfrac{3}{8}$　　　　f) _____ $- \dfrac{4}{5} = \dfrac{1}{5}$

g) $\dfrac{11}{12} -$ _____ $= \dfrac{5}{12}$　　　　h) $\dfrac{4}{7} -$ _____ $= \dfrac{2}{7}$

Find:

6.

a) $\dfrac{1}{3}$ of 60　　　　　　$\dfrac{1}{3}$ of 90　　　　　　$\dfrac{1}{3}$ of 1,200

b) $\dfrac{1}{7}$ of 63　　　　　　$\dfrac{2}{7}$ of 63　　　　　　$\dfrac{3}{7}$ of 63

Review
Units of length, area, capacity and time

7. a) 6dm 8cm + 2dm 9cm − 7dm 7cm = _____

b)3m 9dm + 5m 6dm − 4m 8cm = _____

8. Compare using $<, >$ or $=$:

a) 8m2 ___ 80dm2　　　b) 7m2 _____ 700cm2　　　　　c) 310cm ___ 31dm

9. Express in centimeters:

a) 1/2 dm =　　　　　1/5 dm =　　　　　　1/10dm =

b) 1/2m =　　　　　　1/5m =　　　　　　1/10m =

10.

Complete the sentences:

a) There are _____ seconds in a minute

b) There are _____ minutes in an hour

c) There are _____ seconds in a half a minute.

d) There are _____ seconds in 10 minutes

e) There are _____ hours a day

f) There are _____ hours in a half day

11.

Remember: 1,000ml = 1 liter;   1,000g = 1kg;

a) Eli has a one-liter bottle of water and drinks half of it at lunchtime, how many ml are left? _____

b) $7 \text{ kg} - $ _____ $ = 5\frac{1}{2} \text{ kg}$ $3\text{kg } 200\text{g} + $ ___ $ = 4\frac{1}{2} \text{ kg}$

c) Steven has 3 bottles of water with 500 ml in each. Ronav has one bottle of water with 1 and a half liters in it. Who has the most water? _____

d) There are 12 liters of milk in a 12l bucket. How can you share this milk equally between two families using two empty buckets: 3l and 8l? _____

_____

12

 To make a net of a cube, first look at one, such as a dice. How many faces does it have? Six, so make sure that your net has six squares. Now you must work out a way to arrange six squares so they will fold up into a cube. There are eleven different ways to do this, apart from rotations (turn it round) and reflections (turn it over). See if you can find them all below. Explain your reasoning.