Math 2 Homework 17



Insert the parenthesis to make each equality correct.

- a) $6 + 2 \times 5 = 40$
- b) $3 \times 4 + 2 = 18$
- c) $3 + 4 \times 2 + 4 = 42$
- d) $4 + 3 + 2 \times 2 = 18$

Write an equation for each question. Find the numbers. Check your answers.

a) What number should be increased by 128 to get 800?

b) What number should be decreased by 128 to get 800?

c) By how much the number 928 should be decreased to get 800?

By how much the number 672 should be increased to get 800?

3

Calculate:

$$548 + 548 \times 0 =$$
 $491 \times 0 + 491 =$ $864 - 0 =$

$$491 \times 0 + 491 =$$

$$864 - 0 =$$

$$346 \times 1 - 346 \times 0 =$$

$$0 + 0 =$$

$$0 - 0 =$$

$$2 \times 0 - 2 \times 0 =$$

$$2 \times 0 + 2 \times 0 =$$

$$0 \times 39 =$$

$$20 \times 1 - 0 =$$

$$15 \times 3 + 15 \times 0 =$$

$$200 \times 1 - 1 \times 10 =$$

Open parentheses and try to simplify (find like terms and see if some of them can be canceled).

HINT: if you do everything correctly, the answer will be just one letter!

$$(a+b+c)-(c-d-e-f-g)-(a+b)-(e+d+f+g)+a=$$



Report the time you spent: _____ minutes

5

Explain step by step how you cross the road (create a **branching algorithm**). Be prepared to explain your algorithm to the class:

a) Roads with a signalized crossing (signs "Walk" and "Don't walk")



- 1. _____
- 2.
- 3.

- 4. _____
- 5. _____
- 6. _____

Add steps if needed: _____

b) Roads with marked crossing but without signals



- 1
- 3
- 3

- 4. _____
- 5.
- 6. _____

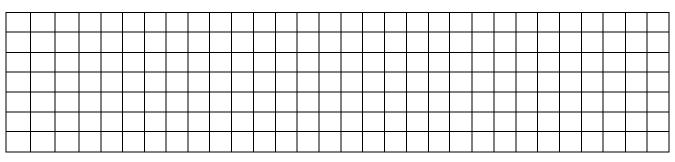
Add steps if needed: _____

Solve each equation, check your answers.

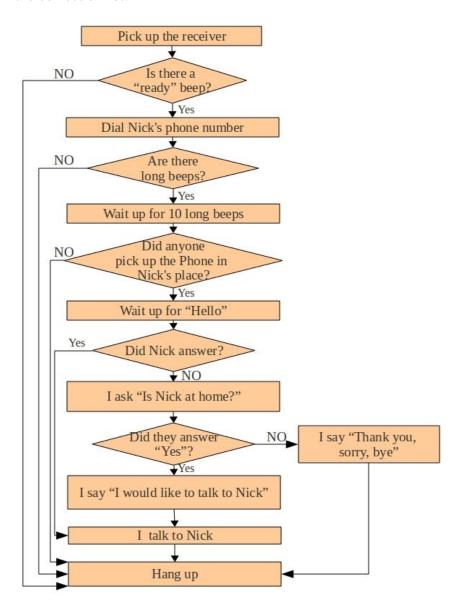
$$348 - x = 265$$

$$x + 738 = 856$$

$$x - 524 = 97$$



Alex wants to call Nick on the phone. He wrote an algorithm with the sequence of operation he must follow in order to make a call. Look at the sequence of operations in his algorithm and check whether it is correct or not.



8 S

Solve the problems:

a) There are four cartons of eggs, and each carton has 6 eggs. Two eggs are gone bad. How many fresh eggs are there in four boxes?

b) The family ordered 5 fruit baskets. Each basket contains 4 apples. They also had two apples in the fridge. How many apples do they have after receiving the baskets?

9

Learning multiplication table by 3, 4 and 9. Your life will be a lot easier when you can simply remember the multiplication tables. So ... train your memory!

First, read it aloud - sing or chant the table. This is the auditory learning - not only have you spoken the table, but you have also heard it.

Second, repeat, repeat and repeat some more - repetition is the key to learning tables (or other facts). The more you say the table aloud, the more you will learn it like you learn word to a song.

And ... practice!

$$2 \times 4 =$$
 $3 \times 9 =$
 $3 \times 8 =$
 $2 \times 9 =$
 $4 \times 4 =$
 $5 \times 4 =$
 $5 \times 9 =$
 $4 \times 2 =$
 $5 \times 9 =$
 $4 \times 7 =$
 $4 \times 3 =$
 $5 \times 4 =$
 $5 \times 4 =$
 $5 \times 9 =$
 $5 \times 8 =$

×	1	2	3	4	5	6	7	8	9
1	1	2	3	4	5	6	7	8	9
2	2	4	6	8	10	12	14	16	18
3	3	6	9	12	15	18	21	24	27
4	4	8	12	16	20	24	28	32	36
5	5	10	15	20	25	30	35	40	45
6	6	12	18	24	30	36	42	48	54
7	7	14	21	28	35	42	49	56	63
8	8	16	24	32	40	48	56	64	72
9	9	18	27	36	45	54	63	72	81

Insert the numbers to make the equations correct. Choose the numbers which are not the same as already used:

 $3 \times 6 =$

$$4 \times 5 = \underline{\hspace{1cm}} \times \underline{\hspace{1cm}}$$

$$\underline{}$$
 × $\underline{}$ = 3 × 8

$$\underline{}$$
 × $\underline{}$ = 5 × 9

10 Write down numerical expressions, using operation signs and parentheses, and calculate the value or simplify expressions where possible:

a) Subtract 805 from the difference of 120 and 15 _____

 $9 \times 9 =$

- b) To the sum of 35 and 15 add number 505 _____
- c) To the difference of 250 and 100 add a sum of 46 and 24 _____
- d) From the difference of 234 and *a* subtract a number 34 _____

11

b) Compare:

25dm ____ 250cm

1m 15cm _____ 11dm 5cm

3m ____ 40dm

7dm 8cm ____ 78 cm

68dm _____ 6m 80 cm

609cm ___ 69dm

HW 17

Multiplication by 0 and 1. Branching Algorithms

12

Solve the problems:

- a) Arthur went to the store 4 times last month. He buys 5 bottles of apple juice each time he goes to the store. How many bottles of apple juice did Arthur buy last month? ______
- b) There are 8 pencils in each box. How many pencils are in 9 boxes?
- c) There are 20 liters of honey total in 3 jars. How many liters will be in one jar if we distribute all that honey evenly among 10 jars?
- d) We need 120 logs to build 2 houses. How many logs do we need to build 6 houses? _____
- e) Evelyn went to the store 8 times last month. She buys 11 stickers each time she goes to the store. How many stickers did Evelyn buy last month?

13

Follow instructions below and fill in the table in the end.

- a) Mark a point on the straight line s. How many rays do you see? _____
- b) Mark 2 points on the line q. How many rays do you see? ____
- c) Mark 3 points on the line w. How many rays do you see? ____
- d) Mark 4 points on the line *m*. How many rays do you see? ____

W

# of points marked	1	2	3	4	5	10	X
# of rays produced							

15

S

Write down the formula for the perimeter for each shape in the simplest way.

