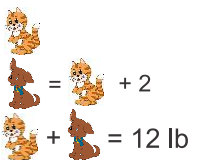Math 4b. Class work 1.

**Word problems.**

1. Can you solve the following problems? Why?

   a. The mother gave her children equally 12 apples. How many apples did each child get?

   b. In total, Peter bought notebooks for $36. How much does each notebook cost?

   c. Maria and Julia made paper snowflakes for the winter holidays. Maria made 18 snowflakes and Julia made 27 snowflakes. How much longer did Julia work if they needed the same amount of time to make a snowflake?

   Add needed information and solve problems.

2. A dog weighs 2 pounds more than a cat. Together, a dog and a cat weigh 12 pounds. How many pounds does the dog weigh? How many pounds does the cat weigh?
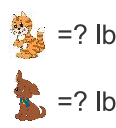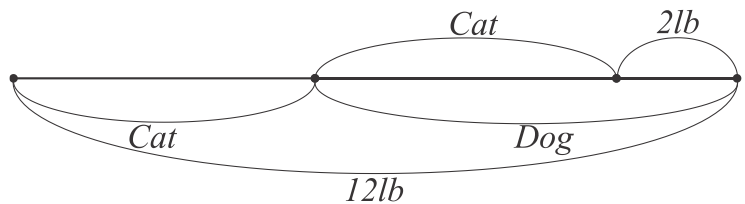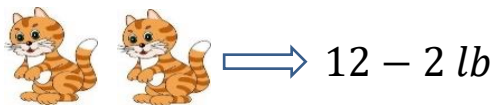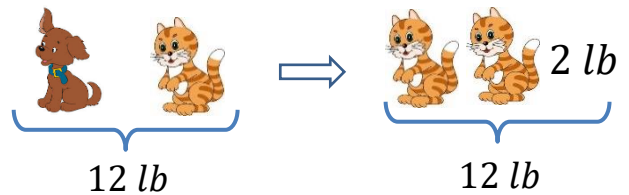
Problem.



What do we know?

= + 2

+ = 12 lb

What is the question?

=? lb

=? lb

12 lb

2 lb

12 lb

$12 - 2$ lb

Cat        2lb

Cat        Dog

12lb

3. An adult elephant weighs 10833 pounds more than a baby elephant. Together they weigh 32037 pounds. How many pounds does a baby elephant weight?

| What do we know? | What is the question? |
|---|---|
|  |  |

Draw a schematic picture of the problem if it can help you:
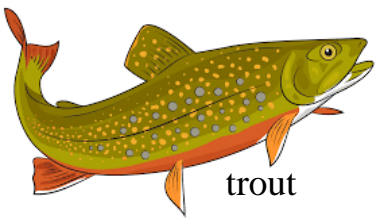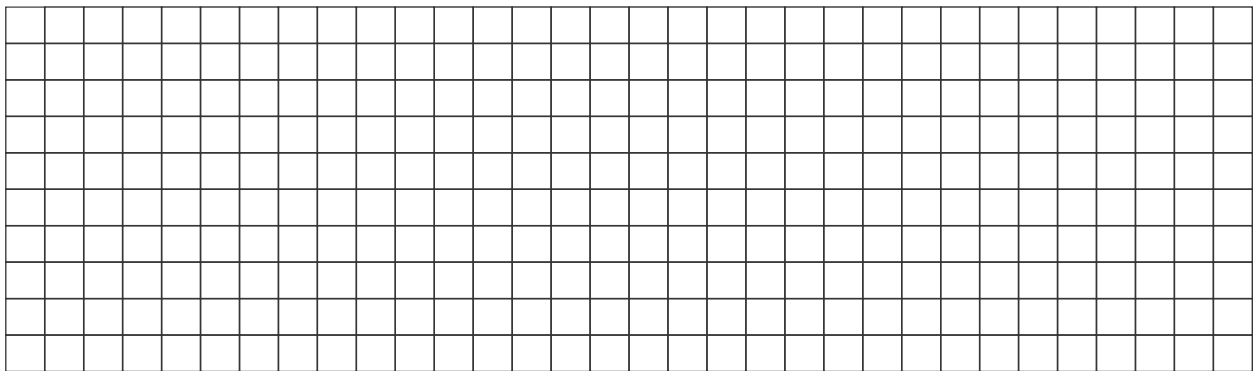
4. There are 4 times more trout in the lake than perch. In total there are 1585 perch and trout. How many trout and how many perches are in the lake?

trout

perch

| What do we know? | What is the question? |
|---|---|
|  |  |

Draw the schematic picture of the problem if it can help you:
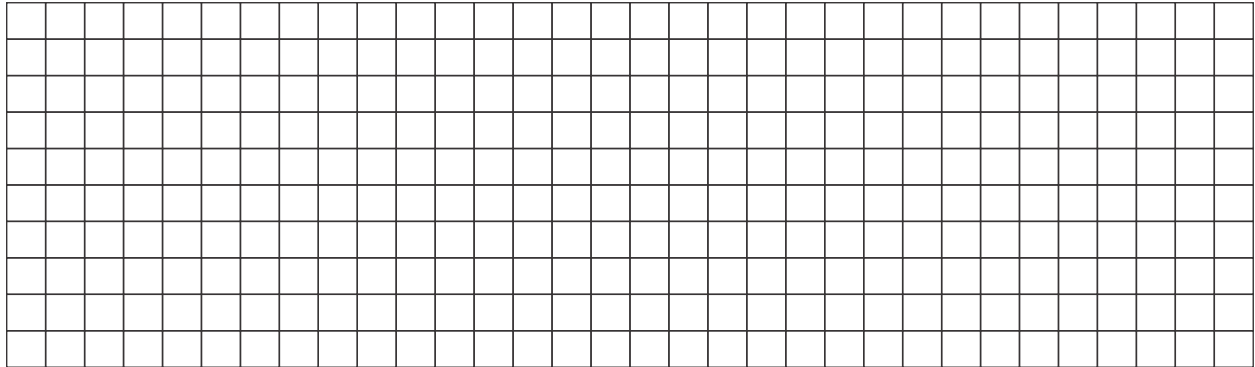
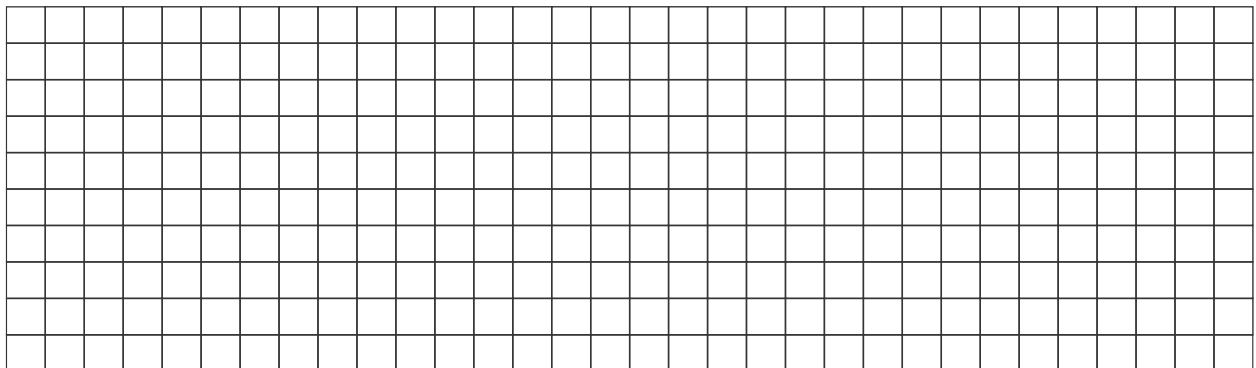5. In an elementary school there are 155 studens. $\frac{3}{5}$ of them like math, half of the rest like language art. How many students do like language art?

| What do we know? | What is the question? |
|---|---|
|  |  |

6. Evaluate:

    $a.$ $(418:418 - 0 \cdot 75) \cdot (62 - 62) + (89 \cdot 1):89;$

    $b.$ $(54:1 + 0:1) \cdot 0 + (25 - 24) \cdot (12 + 0:36);$

7. Peter and Robert went camping. They walked 14 km and rested. After the rest, they walked 6 km less than before the rest, and stopped for the night. Now they have to go three times further than they have already gone. How long is the trip planned?

8. Find the unknown $x$

    $x + 6 = 84;$                        $x \cdot 6 = 84$

    $x - 7 = 63;$                        $x:7 = 63$

    $54 - x = 27;$                     $54:x = 27$

9. In the examples below, some digits were substituted with asterisks. Can you explain if these problems were solved correctly.

    $* + 2* = *$                 $*5 + *7 = *8$              $3** - ** = **$
    $* + * = 6*$                 $**5 + *7 = *2$             $**9 - *4 = **3$

10. Can you compare?

    $x - 315$ ... $x - 415$         $m \cdot 3$ ... $m:3$         $a \cdot 8 + a \cdot 6$ ... $15 \cdot a$

    $y + 205$ ... $502 + y$         $c:38$ ... $c:46$         $b \cdot 24 - b \cdot 10$ ... $b \cdot 7$

$$48 - t \;\text{...}\; 200 - t \qquad\qquad 512 : d \;\text{...}\; 312 : d \qquad\qquad 6 \cdot c + 3 \cdot c \;\text{...}\; c \cdot 9$$

11. Find missing digits:

```
   □9 5            □2 0                3□0 5□              □□□
 +  3□4          -  4□7            ×     8□□          8|□□□□
   ────            ────                 □□□4 5          - 3□
   8 4□            3 6□            +  □9 6□□            ──────
                                      ─────────           2□
                                   2□□□□□□□0            - □□
                                                         ──────
                                                            0
```

12. Solve the following riddles (each letter represents a digit)

```
     S O              U S              C O C A
   + S O            + A S            + C O L A
   ──────           ──────           ────────
   T O O            A L L            O A S I S
```