Homework

1 Calculate and use the numbers to decipher the characters from the R. Kipling's Junale Book.

S	29+1	◯
E	5+45	◯
Y	37+3	◯
K	8+52	◯
O	71+9	◯
R	12+6	◯
M	86+4	◯
T	36-4	◯
N	7+63	◯

90	80	70	60	50	40	30

Decipher the name of a famous folklore traveler.

A	20-3	◯
S	60-8	◯
D	30-9	◯
I	70-2	◯
B	40-7	◯
L	10+4	◯
N	90-5	◯
O	50-1	◯
R	80-6	◯

52	68	85	33	17	21

the

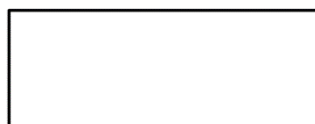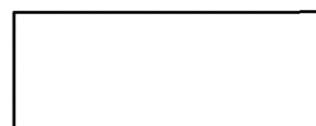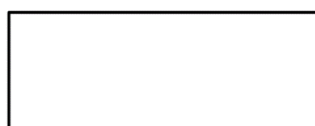| 52	17	68	14	49	74

2 Fill in the diagram for the equations, solve them, and check your answers.

$$x - 22 = 5$$

$$28 - x = 12$$

3 Arrange the items on the shelves in different ways.
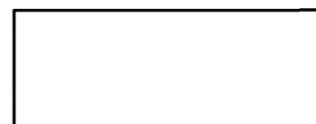
4 Find the result without calculations.

67 + 29 − 29 = ____   67 + 29 − 29 + 54 − 54 = ____

54 − 47 + 47 = ____   54 − 47 + 47 + 81 − 81 − 49 + 49 = ____

28 + 69 − 69 = ____   28 + 69 − 69 − 17 + 17 + 53 − 53 = ____

5 Find the inverse operations when possible, cross out the operations that can't be inverse.

Operation: to put on shoes   **Inverse:** _____

Operation: to break a toy house   **Inverse:** _____

Operation: to cut a water melon   **Inverse:** _____

Operation: to turn on the TV   **Inverse:** _____

Operation: to fry an egg   **Inverse:** _____

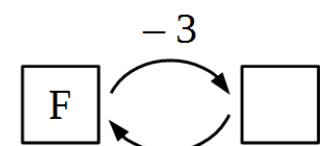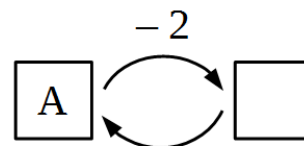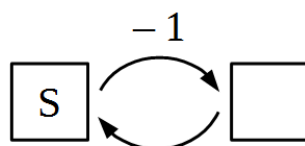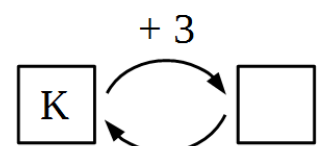**Operation:** to put a cat in a cage   **Inverse:** _____
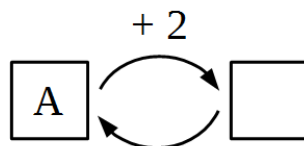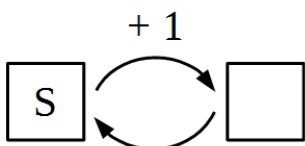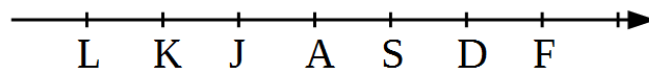
Give your own example on an operation. Does your operation have an inverse one?

Operation:_____   **Inverse:** _____

6 Do the operations using the line if K−L=1.

L K J A S D F

+ 1
S ⟳ ☐

+ 2
A ⟳ ☐

+ 3
K ⟳ ☐

− 1
S ⟳ ☐

− 2
A ⟳ ☐

− 3
F ⟳ ☐

7 Present as tens and ones.

69 = ☐ t + ☐ o = 60 + 9 = _____   38 = ☐ t + ☐ u = _____

73 = ☐ t + ☐ o = _____   24 = ☐ t + ☐ u = _____

57 = ☐ t + ☐ o = _____   44 = ☐ t + ☐ u = _____

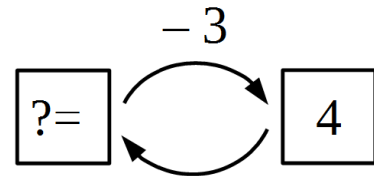**8** Calculate according to the example using column addition method.

```
  1
  2 1        2 2        2 3        2 4        2 5        2 6        2 7
+   9      +   9      +   9      +   9      +   9      +   9      +   9
  3 0
```
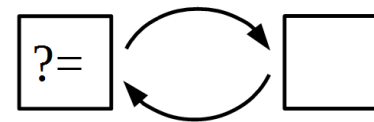
9 Analyze the operations to solve the word problems.

A. After Foxy Tail ate 3 apples during lunch, he had 4 of them left. How many apples did he have before lunch?

-3

?= ⟳ 4

_____

B. After little Joe peeled 27 potatoes, he still had 9 more to peel. How many potatoes did he have to peel in all?

?= ⟳ ☐

_____

C. After receiving a payment of 27 mouse coins, Jake the Mouse had 49 mouse coins in all. How many mouse coins did he have prior to the payment?
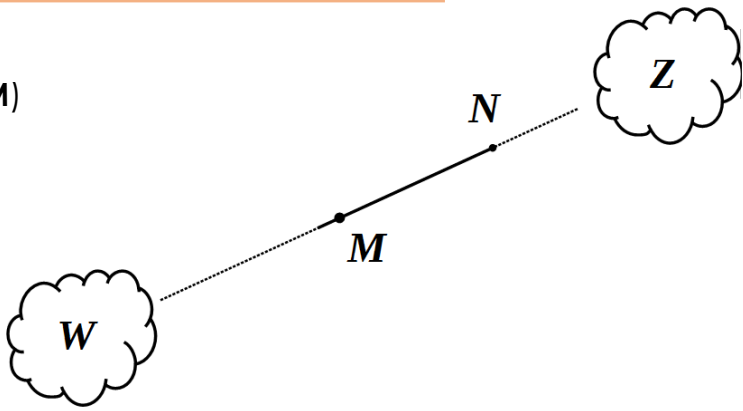
?= ⟳ ☐

_____
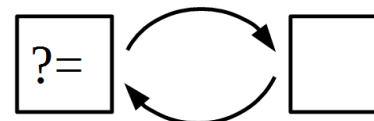
10

Compare rays [**MN**) and [**NM**)

List the clouds pierced by ray [**MN**):

_____

List the clouds pierced by ray [**NM**):

_____

List the clouds pierced by straight line **MN**: _____

11 Find the point where ray [**CE**) intersects straight line **DH**. Label it **S**.

Does ray [**EC**) intersect straight line **DH**? _____

Does ray [**CE**) intersect ray [**DH**)? _____

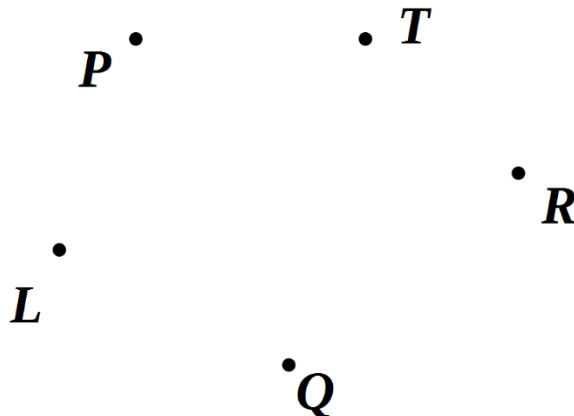Does ray [**CE**) intersect ray [**HD**)? _____
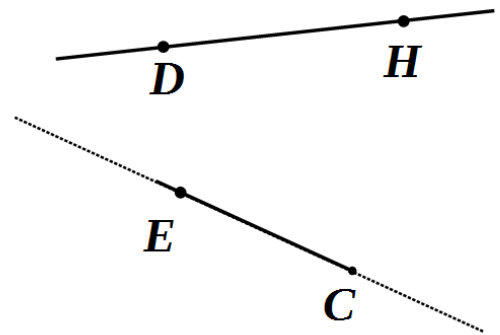
12 Follow the instructions:

1. Plot the line segment [**PQ**].

2. Plot the straight line (**LR**).

3. Find their intersection point and label it **W**.

4. Plot the ray [**WT**).

13 Imagine you have three strips (pieces) of paper (green, blue, and red).

If you glue these strips, how many different three-color tapes can you make? (Hint: think about a colorful sticky tape: one color follows another)

Draw them here:

Test yourself using real color paper strips if you need. You can take three pieces of paper, color and cut them out.

Now, how many different tricolor flags can you make with these strips? (Hint: think about the flags of the different countries: France, Ireland, Russia, etc.)

Draw them here:

Why there are more tricolor flags than tricolor strips? _____

_____

14 Each of the three boys named Nick, John, and Mike owns one of the three dogs on the picture: a collie (yellow), a hound (gray), and a spaniel (dark brown). Write the name of each owner under the picture of his dog if John does not own the hound, and John and Mike do not own the spaniel.