## Lesson 4

## 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 | $71+9$ |
| :--- | :--- |


| $R$ | $12+6$ |
| :--- | :--- |

$\bigcirc$

| 90 | 80 | 70 | 60 | 50 | 40 | 30 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |


| M | $86+4$ |
| :--- | :--- |


| T | $36-4$ |
| :--- | :--- |


| N | $7+63$ |
| :--- | :--- |

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.

| $x$ | - | 2 | 2 | $=$ | 5 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |



3 Arrange the items on the shelves in different ways.


4 Find the result without calculations:
$67+29-29=$ $\qquad$ $67+29-29-54+54=$ $\qquad$
$54-47+47=$ $\qquad$ $54-47+47+81-81-49+49=$ $\qquad$
$28+69-69=$ $\qquad$ $28+69-69-17+17+53-53=$ $\qquad$

5 Find the inverse operations when possible, cross out the operations that can' $\dagger$ be inverse:

Operation: to put on shoes
Operation: to break a toy house
Operation: to cut a water melon
Operation: to turn on the TV
Operation: to fry an egg
Operation: to put a cat in a cage

Inverse: $\qquad$
Inverse: $\qquad$
Inverse: $\qquad$
Inverse: $\qquad$
Inverse: $\qquad$
Inverse: $\qquad$

Give your own example on an operation. Does your operation have an inverse one? Operation: $\qquad$ Inverse: $\qquad$

6 Do the operations using the line:


7 Present as tens and ones:
$69=\square \mathrm{t}+\square \mathrm{O}=60+9=\square 38=\square \mathrm{t}+\square \mathrm{u}=$
$73=\square \mathrm{t}+\square \mathrm{O}=$
$24=\square \mathrm{t}+\square \mathrm{u}=$
$\qquad$
$\qquad$
$57=\square \mathrm{t}+\square \mathrm{o}=$ $\qquad$ $44=\square \mathrm{t}+\square \mathrm{u}=$ $\qquad$

8 Calculate according to the example using column addition method:

| 1 |  |
| ---: | :--- |
| 2 | 1 |
| $+\quad 9$ |  |
| 30 |  |
|  |  |



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?

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 Mouth had 49 mouse coins in all. How many mice coins did he have prior to the payment?


List the clouds pierced by ray [MN):

List the clouds pierced by ray [NM):


List the clouds pierced by straight line MN: $\qquad$

11 Find the point where ray [CE) intersects straight line $\mathbf{D H}$. Label it $\boldsymbol{S}$.


Does ray [EC) intersect straight line $\mathbf{D H}$ ? $\qquad$
Does ray [CE) intersect ray [DH)? $\qquad$
Does ray [CE) intersect ray [HD)? $\qquad$


12 Follow the instructions:

1. Plot the line segment [PQ].
2. Plot the straight line (LR).
3. Find their intersection point and label it $\boldsymbol{W}$.
4. Plot the ray [WT).


13 Imagine you have three strips of paper. Color these strips:


If you glue these strips, how many different three color tapes can you make?
Draw them here:

Test yourself using real color paper strips.
Now, how many different flags can you make out of these tricolor strips?


Why are there more tricolor flags than tricolor strips? $\qquad$

14 Each of the three boys named Nick, John, and Mike owns one of the three dogs on the picture: a collie, a hound, and a spaniel. 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.

$\square$


