## Expressions

1 "I think of a number" game with Little Joe.
LJ thought of a number. He added 16 , subtracted 30 , added 27 , subtracted 20 , and got 100 . What was LJ's number?


2 In your notebook, solve the equations and write you solutions similarly to the example. Copy your answers here. Make drawings if needed.

$$
\begin{array}{lll}
746-x=318 & 250+y=879 & z-456=67 \\
x= & y= & z=
\end{array}
$$

What does each sack contain?


4
Foxy Tail, Little Joe, and Jake the Mouse went fishing. Little Joe caught 5 fish. Jake the Mouse caught 3 fish more than Little Joe. Foxy Tail caught 1 fish less than Jake the Mouse.

Which questions may be answered by evaluating the following expressions?
a) 5+3-How many fish ... $\qquad$
b) $5+3-1-$ $\qquad$
c) $5+(5+3)-$ $\qquad$
d) $5+(5+3-1)$ - $\qquad$
e) $5+(5+3)+(5+3-1)-$ $\qquad$

5 Write the expressions.
There are $\mathbf{5}$ pencils in one box and $\mathbf{1}$ in another. How many pencils are in both boxes?

There are $\mathbf{7}$ pencils in one box and $\boldsymbol{m}$ in another. How many pencils are in both boxes?

There are $\boldsymbol{k}$ pencils in one box and $\boldsymbol{d}$ in another. How many pencils are in both boxes?

There are 9 pencils in two boxes. Out of them 5 are in the first box. How many pencils are in the second?

There are a pencils in two boxes. Out of them 5 are in the first box. How many pencils are in the second?

There are $\boldsymbol{a}$ pencils in two boxes. Out of them $\mathbf{b}$ are in the first box. How many pencils are in the second?

6 Find the order of operations and solve:
$12+8-7+13=$ $\qquad$
$(12+8)-(7+13)=$ $\qquad$
$12+(8-7+13)=$ $\qquad$
7 Compare:

$$
\begin{array}{ll}
a \ldots \ldots a-7 & n+3 \ldots \ldots . n+(3-1) \\
a-7 \ldots \ldots a-7+1 & n-3 \ldots \ldots n-(3-1) \\
a-7 \ldots . a-(7+1) & x-3 \ldots \ldots .(3-1)
\end{array}
$$

8
Pick the right diagram for the sets of $\square$ swans and
 white birds.

Give examples for the elements 1, 2, and 3 in the proper diagram.

1. $\qquad$
2. $\qquad$
3. $\qquad$


9 Imagine that a green sheet of paper lays on top of a white sheet. Use a solid red line to trace the borders of both sheets that you can see. Using a dashed red line to trace the borders of both sheets that you cannot see.


10
Color the shape that lays on top.


11 Color the pentagon if:
a) the pentagon is on top of the quadrilateral;
b) the pentagon is under the quadrilateral.


12 "Program" the Black Box to perform another operation and ask somebody to figure out what operation the Black Box is performing.
1.

2.

3.

4.

5.

6.

$\Rightarrow$


