## Lesson 18

## Area.

1 Check the result of the equations that Foxy Tail solved.
$52+x=275$
$y-618=144$
$\mathbf{z}-200=576$
$x=183$
$y=974$
$z=776$

## Check:

2
Open up the parentheses:

$$
\begin{array}{ll}
78+(a+11)= & 82-(5+t)= \\
95+(a+b+d)= & 56-(h+d)= \\
78+(a-71)= & 71-(c-54)= \\
19+(14-b)= & d-(a-f+g)=
\end{array}
$$

3 Solve the word problems:
A. Little Joe and Foxy Tail bought 12 bananas, 17 oranges, and 26 plums. How many fruit did they buy in all?

B. Little Joe and Foxy Tail bought 12 bananas, 17 oranges, and some plums. Altogether they bought 42 fruit. How many plums did they buy?

C. Little Joe and Foxy Tail bought 12 bananas, $\boldsymbol{m}$ oranges, and $\boldsymbol{k}$ plums. How many fruit did they buy in all?
$\qquad$

D. Little Joe and Foxy Tail bought wananas, $\mathbf{x}$ oranges, and some plums. Altogether they bought $\boldsymbol{m}$ fruit. How many plums did they buy?


4 For each multiplication fact, write also a division fact. Think about the groups! Use a multiplication table if needed.
a. $4 \times 2=$ $\qquad$ b. $8 \times 4=$ $\qquad$ c. $9 \times 6=$ $\qquad$
$\qquad$ $\div 2=-4$ $\qquad$
$\qquad$ $\div 4=$ $\qquad$
$\div 9=$ $\qquad$
d. $3 \times 8=$ $\qquad$ e. $6 \times 4=$ $\qquad$
f. $10 \times 7=$ $\qquad$
$\qquad$ $\div+$ $\qquad$
$\qquad$ $\div$ $\qquad$ $=$ $\qquad$
$\qquad$ $\div$ $\qquad$ $=$ $\qquad$
5 For each division, think of the corresponding multiplication and solve. Use multiplication table if needed.
a. $36 \div 6=$ $\qquad$ b. $28 \div 4=$ $\qquad$
c. $49 \div 7=$ $\qquad$
$\qquad$

$$
\times 6=36
$$

$\qquad$ $\times 4=$ $\qquad$
$\qquad$ $\times 7=$ $\qquad$
d. $60 \div 6=$ $\qquad$
e. $20 \div 4=$ $\qquad$
f. $18 \div 3=$ $\qquad$
$\qquad$
$\times$ $\qquad$ = $\qquad$
$\qquad$ $\times$ $\qquad$ $=$ $\qquad$
$\qquad$ $\times$ $\qquad$ $=$ $\qquad$
6 Compare one- digit and two-digit numbers using $>,<$, or $=$. The letters (aka magical numbers) can be any digit between 1 and 9 .
$S P \square M$
Q0 $\square$ Q1
KL $\square \mathrm{LK}$

Solve the problems with one-digit and two-digit numbers:

$$
8 C-4 C=\quad 2 B+10=\quad A+A A+A A A=123
$$

7 Write only A's to balance each scale.


## BBB



## Area

8 Look at measures $a$ and $b$ the shape $\mathbf{Q}$ and.
How many times does measure a fit in shape $\mathbf{Q}$ ? $\qquad$ How many times does measure $\mathbf{b}$ fit in shape $\mathbf{Q}$ ? $\qquad$ We write: $\mathbf{Q}=\ldots \mathbf{a}$ or $\mathbf{Q}=\ldots \mathbf{b}$


9 Measure the shapes below with provided measures:
$\boldsymbol{R}=$ $\qquad$ $a$
$\boldsymbol{R}=$ $\qquad$ b



$$
N=\_\quad a
$$

$$
N=\ldots \quad d
$$





10 Measure the areas of the shapes in square centimeters and in cells:

$A=$ $\qquad$ $\mathrm{cm}^{2}=$ $\qquad$ cells $\boldsymbol{B}=$ $\qquad$ $\mathrm{cm}^{2}=$ $\qquad$ cells
$C=$ $\qquad$ $\mathrm{cm}^{2}=$ $\qquad$ cells $\boldsymbol{D}=$ $\qquad$ $\mathrm{cm}^{2}=$ $\qquad$ cells

11 Find coordinates of the points $C$ and $D$ as well as the coordinates of the other objects.



12 Find the point of intersection of the curves $\mathbf{A B}$ and $\mathbf{C D}$. Mark the intersection with a point and name it $\boldsymbol{E}$.


13 The paths $\boldsymbol{K B T}$ and $\mathbf{M A N}$ are laid through a forest. At what points do the paths intersect?


Through which point does the way from point $\boldsymbol{K}$ to point $\boldsymbol{M}$ pass?
Which ways lead from point $\boldsymbol{O}$ to point $\boldsymbol{P}$ ? Trace them with your pencil.
What are the two best ways from point $\boldsymbol{K}$ to point $\boldsymbol{N}$ ?

