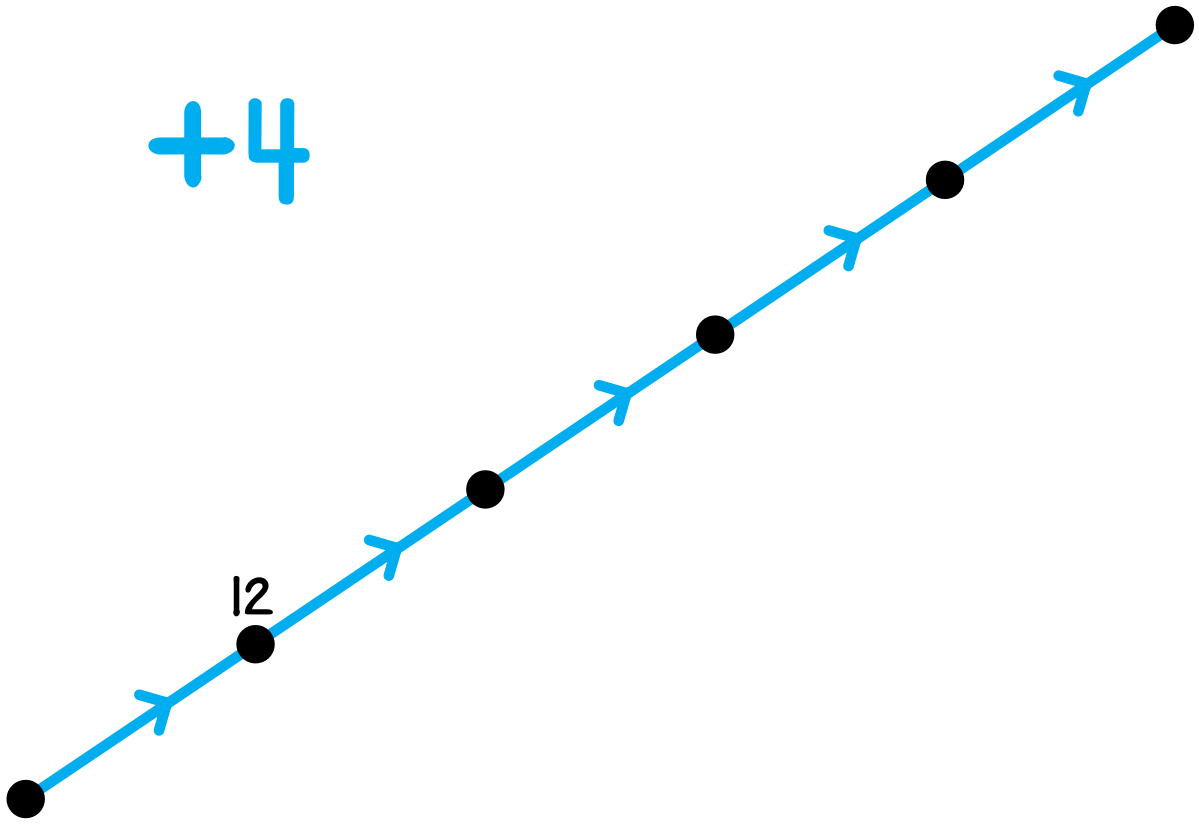
Galaxy of Problems #1

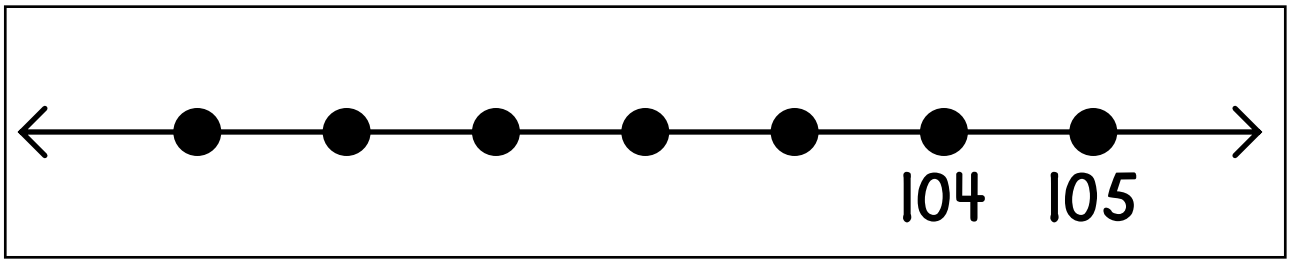
Label the dots.
Circle the greatest number in this arrow picture.

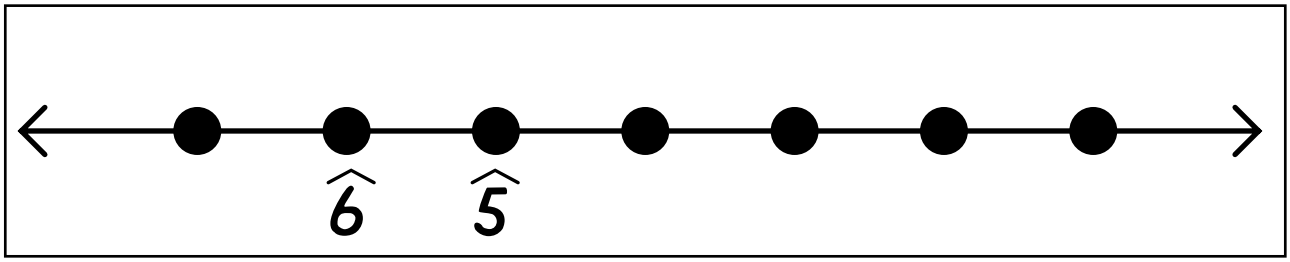


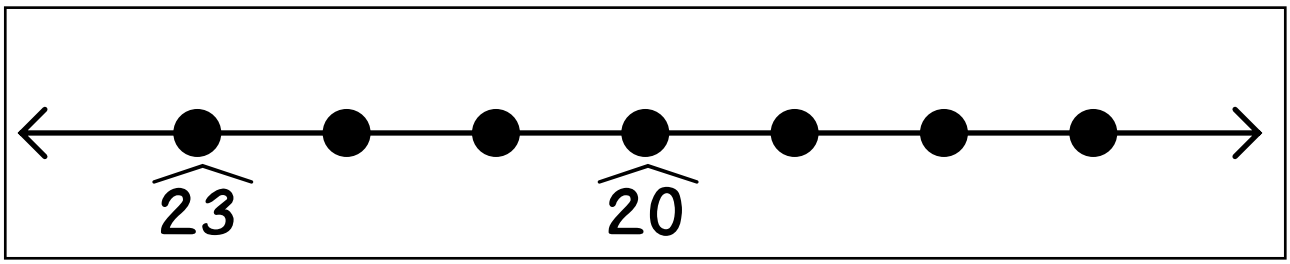
Complete.

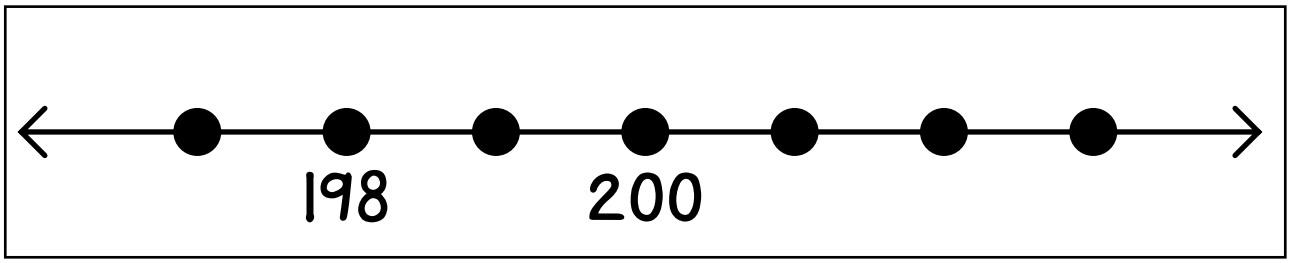
8 + 4 =	14 + 4 =	18 + 4 =	20 + 4 =	28 + 4 =
16 + 4 =	26 + 4 =	15 + 4 =	35 + 4 =	17 + 4 =

Label the dots on these number lines.

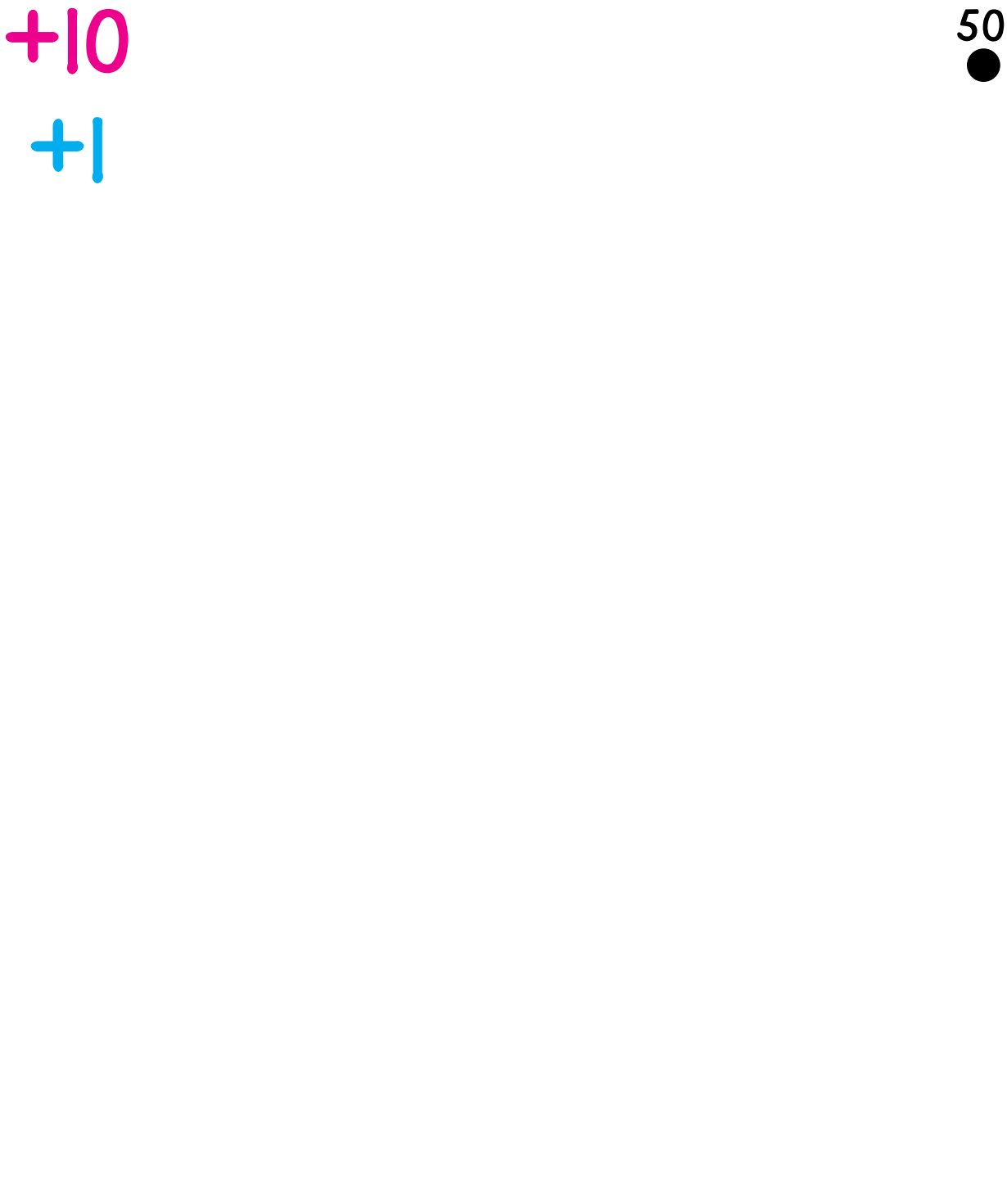








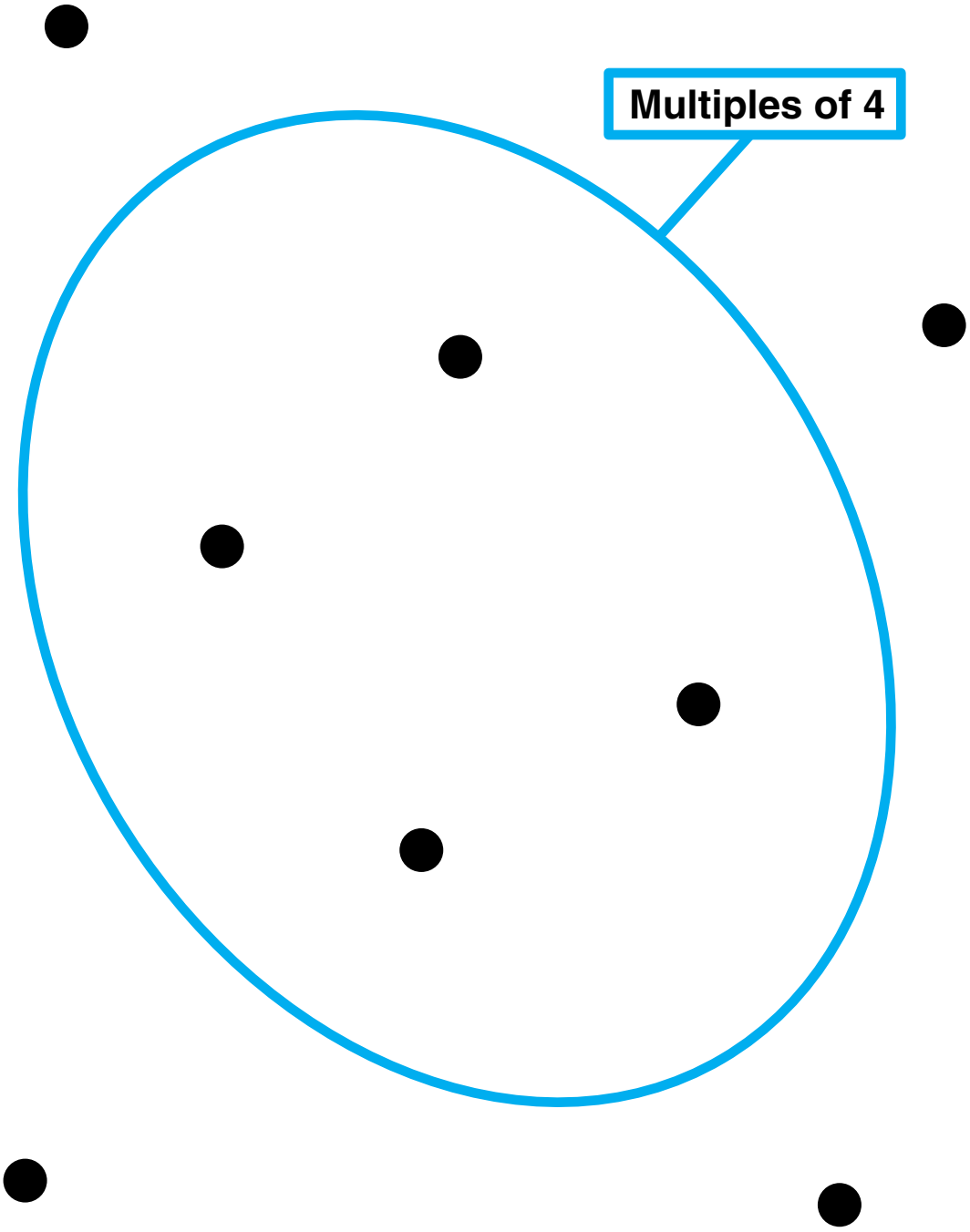
Build an arrow road from 5 to 50 using +10 and +1 arrows.



How many +10 arrows? _____

How many +1 arrows? _____

Label the dots in this string picture.
Many solutions are possible.

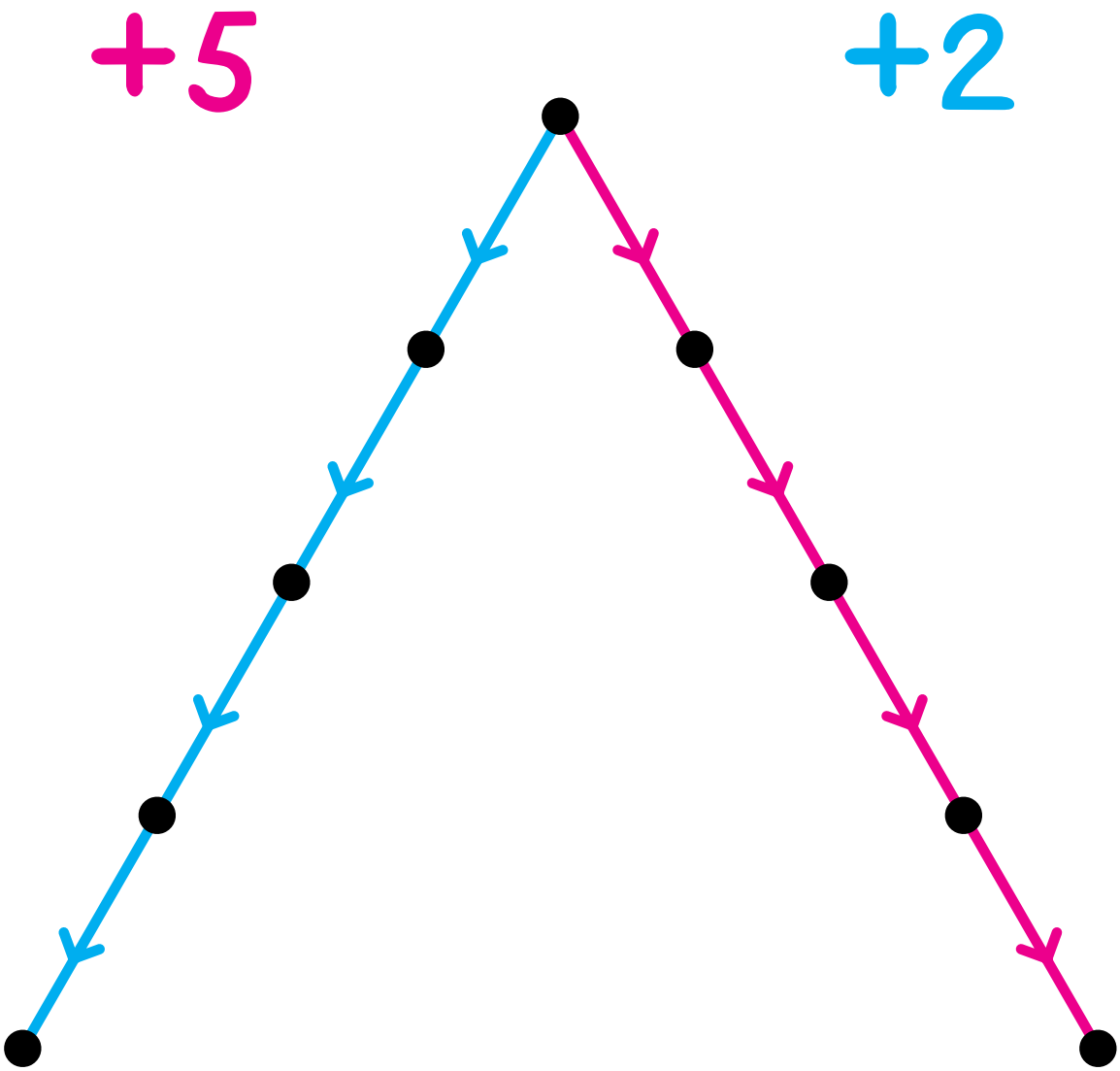


Complete this addition table.

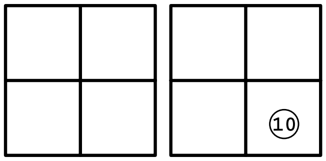
+	10	9	7	8
10				
8				
9				
7				

9 +9	7 +8	8 +9	7 +7	10 +9
6 +8	7 +11	12 +9	15 +8	16 +10

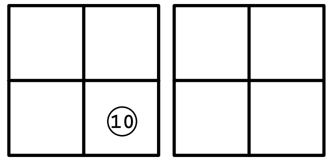
7 is the least number in this arrow picture. Label the dots.



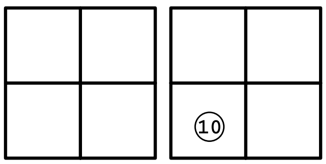
What number is on the Minicomputer?



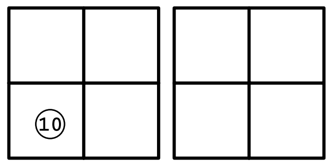
= ______



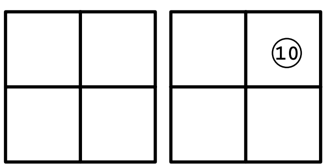
= ______



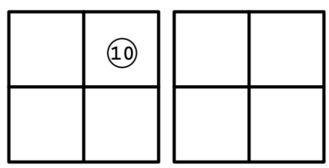
= ______



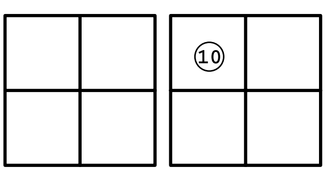
= ______



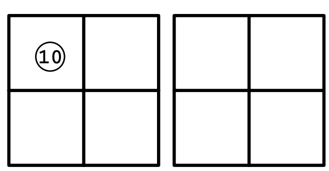
= ______



= ______

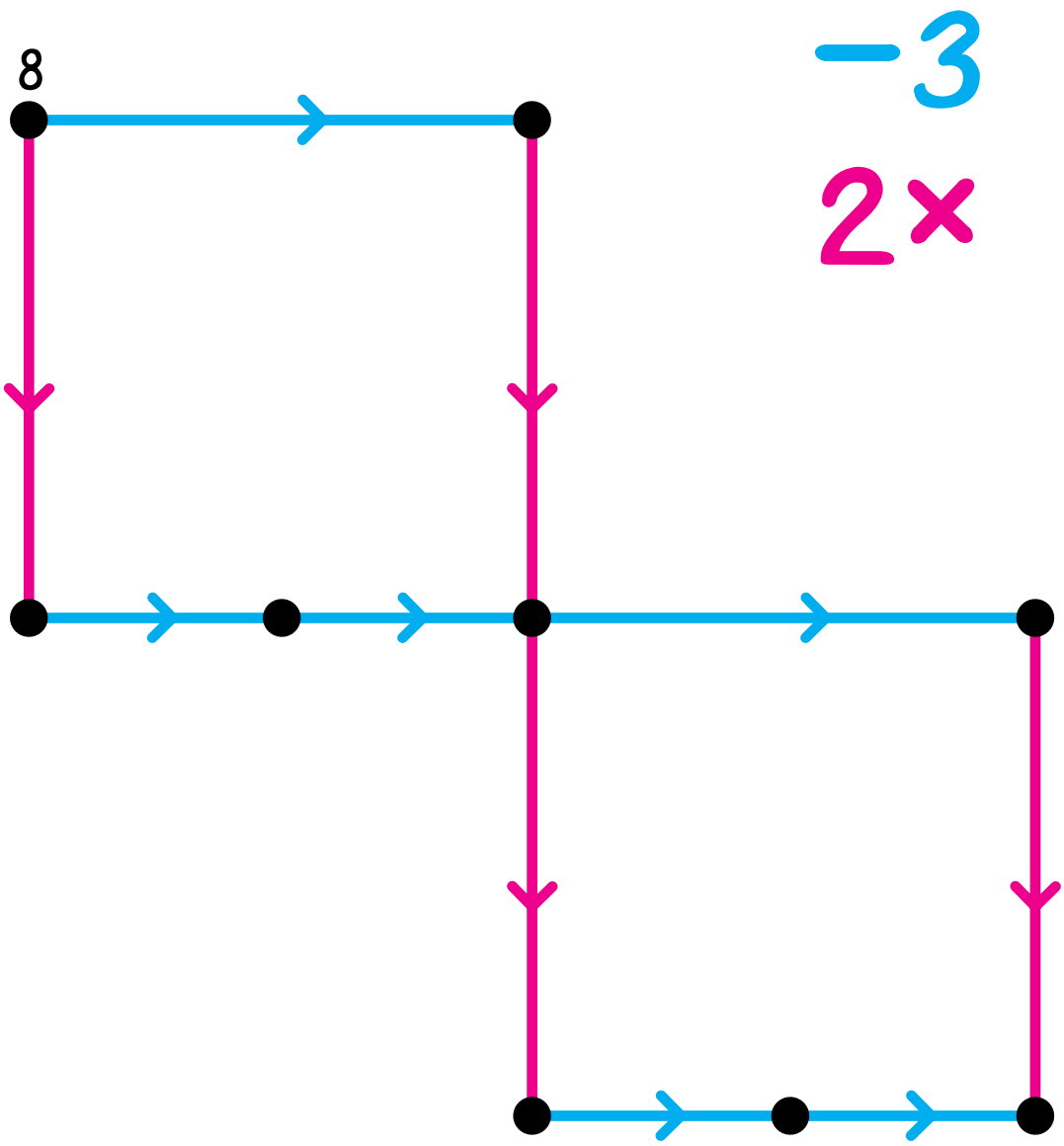


= ______



= ______

Label the dots.
Circle the greatest number in this arrow picture.



Complete.

$15 + 15 + 15 =$ _____

$21 + 21 + 21 =$ _____

$3 \times 15 =$ _____

$$\begin{array}{r} 21 \\ \times\ 3 \\ \hline \end{array}$$

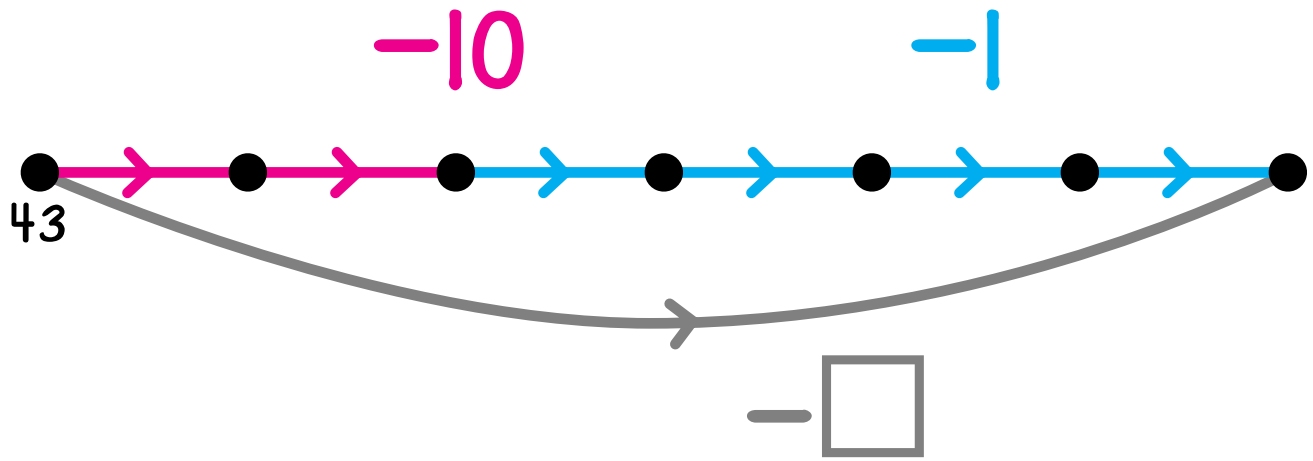
$$\begin{array}{r} 16 \\ 16 \\ +\ 16 \\ \hline \end{array}$$

$3 \times 16 =$ _____

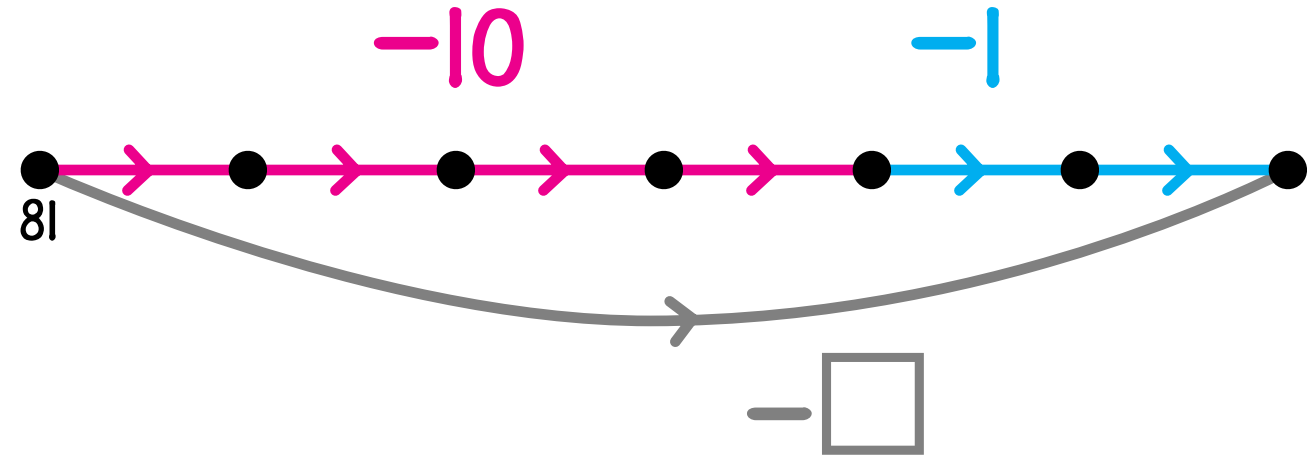
$$\begin{array}{r} 18 \\ 18 \\ +\ 18 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \\ \times\ 3 \\ \hline \end{array}$$

Label the dots. Fill in the box for each gray arrow.



Write a calculation shown by the gray arrow. _____

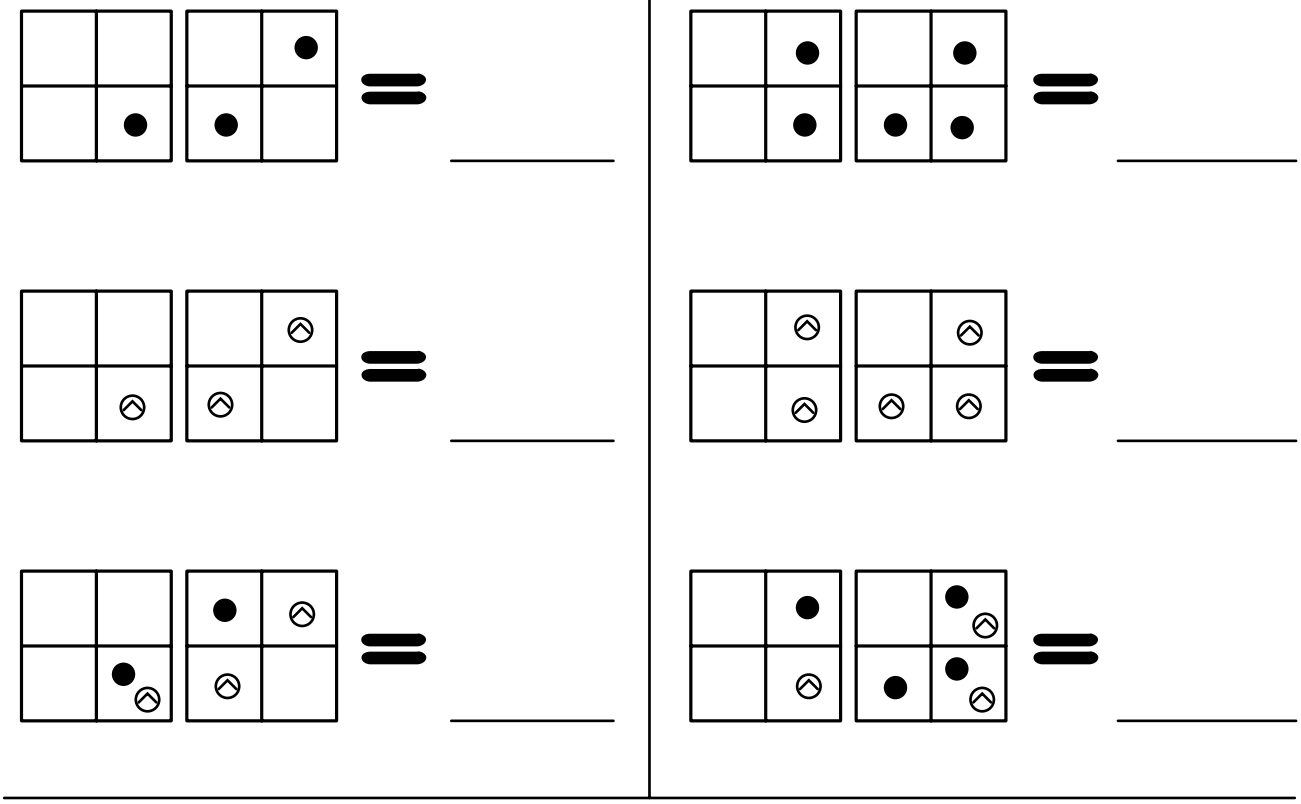


Write a calculation shown by the gray arrow. _____

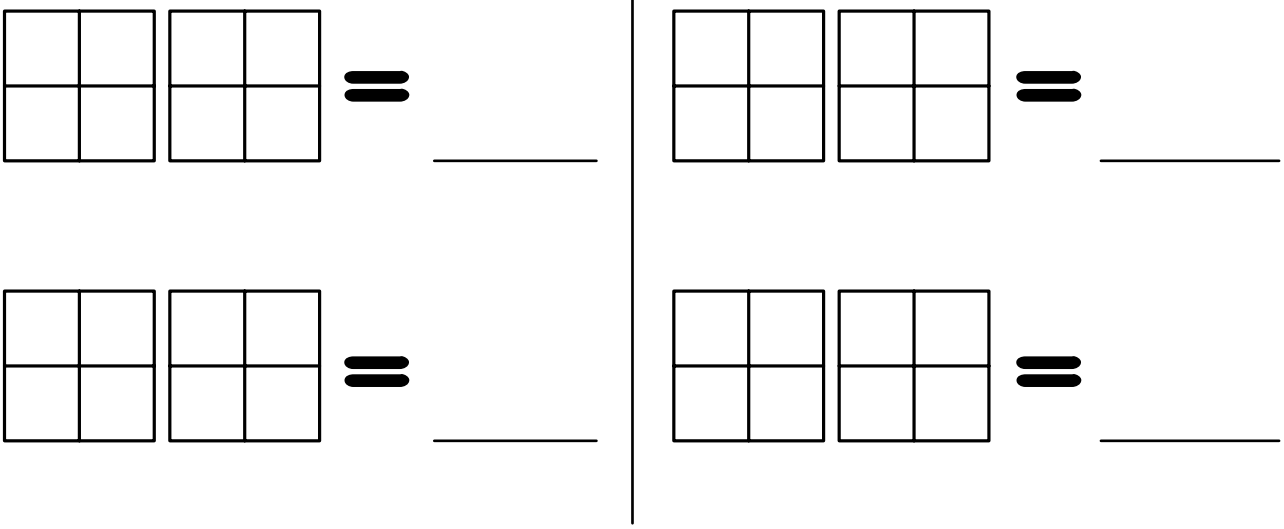
Draw an arrow picture to do this subtraction calculation.

$51 - 33$

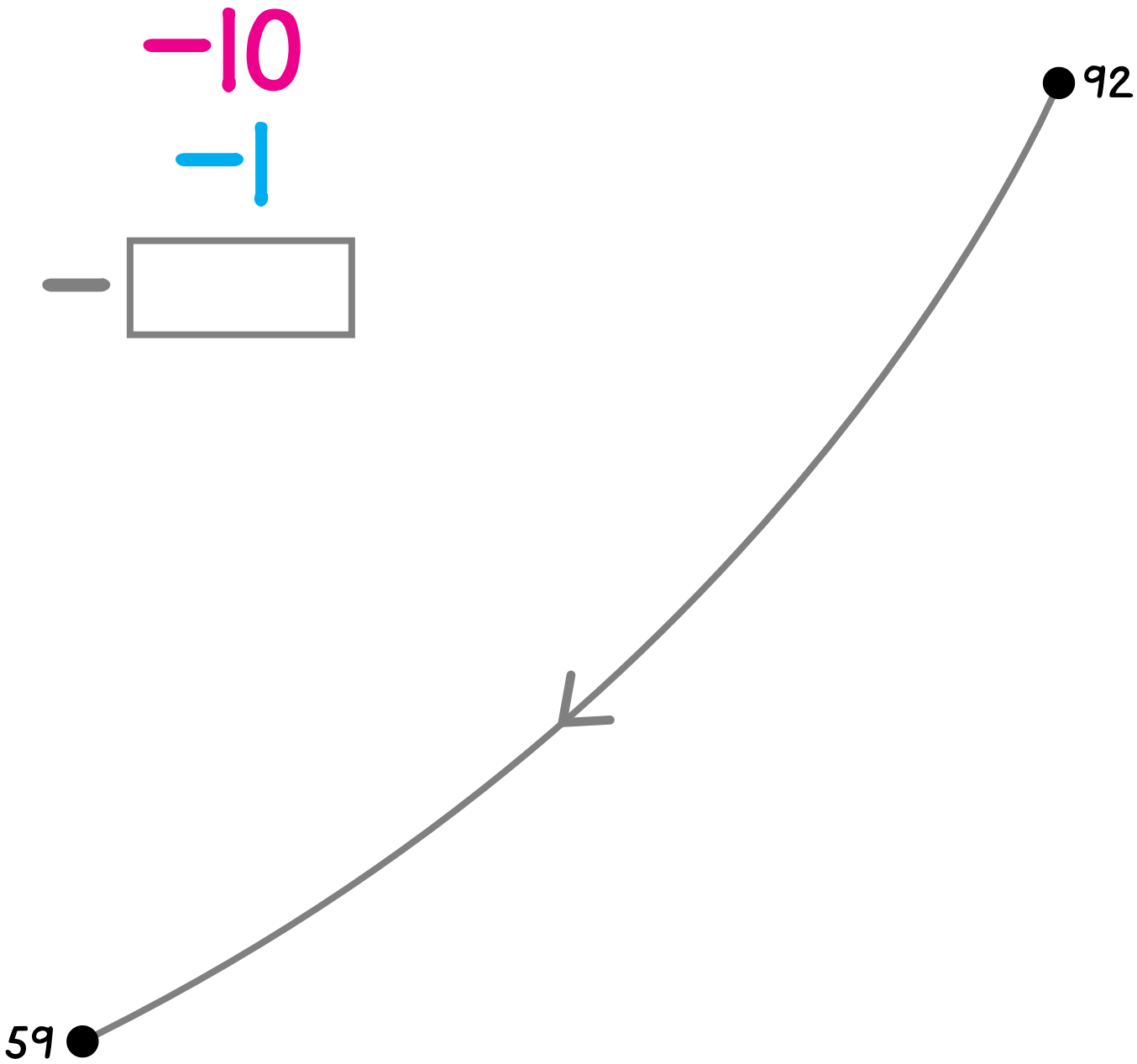
What number is on the Minicomputer?



Put any number you wish on the Minicomputer using two positive checkers and one negative checker.



Build an arrow road from 92 to 59 using –10 and –1 arrows.
Fill in the box for the gray arrow.



Write a calculation shown by the gray arrow.

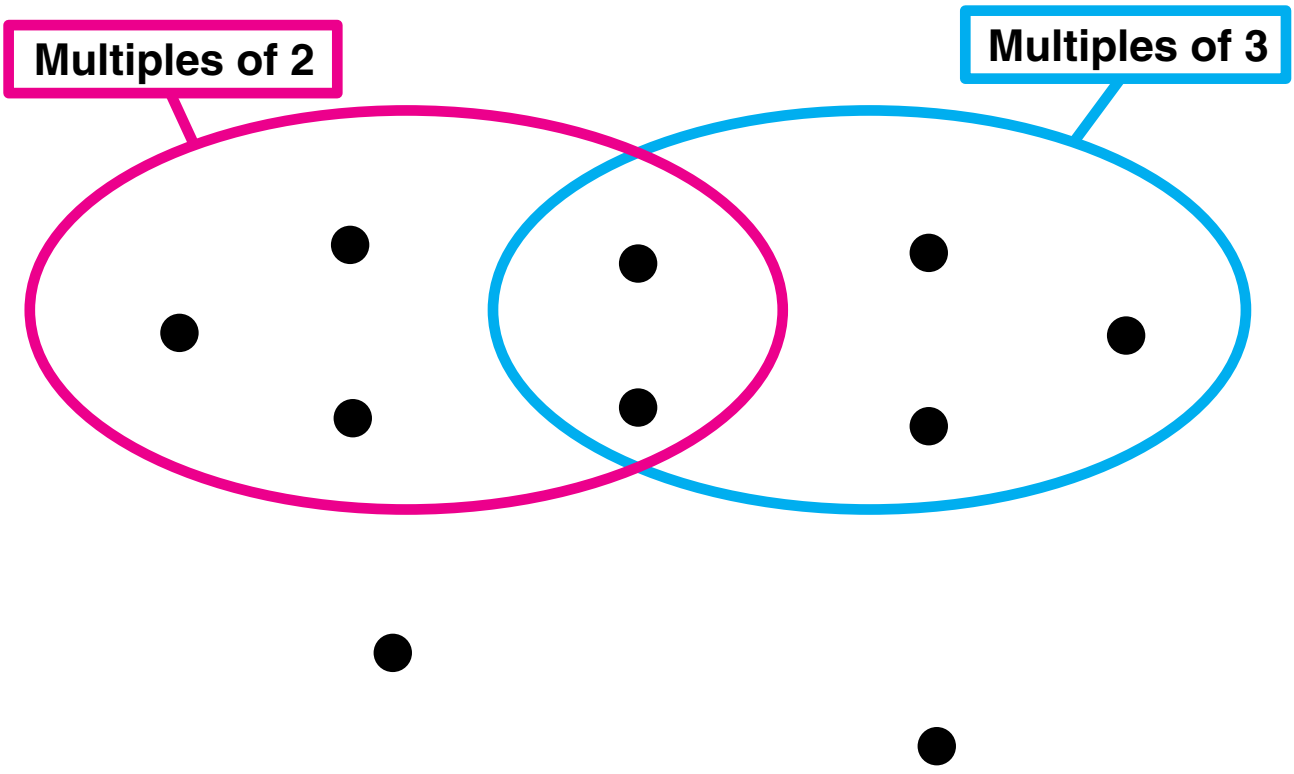
Complete this subtraction table.

−	5	7	3	8
10				
15				

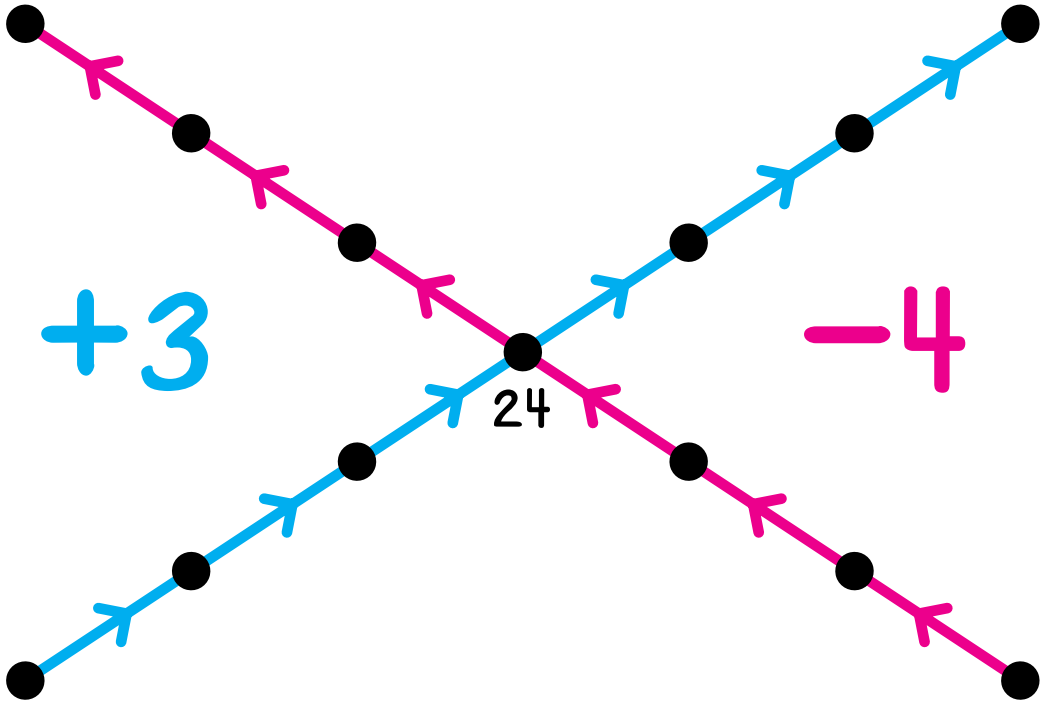
Complete this multiplication table.

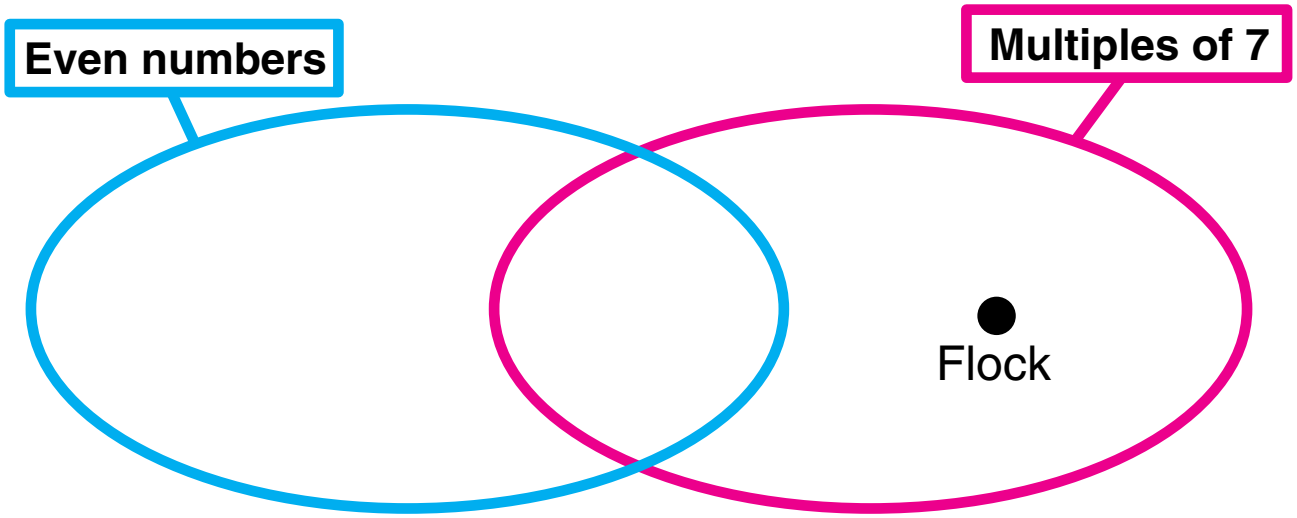
×	6	4	9	10
2				
3				

Label the dots in this string picture.
Many solutions are possible.



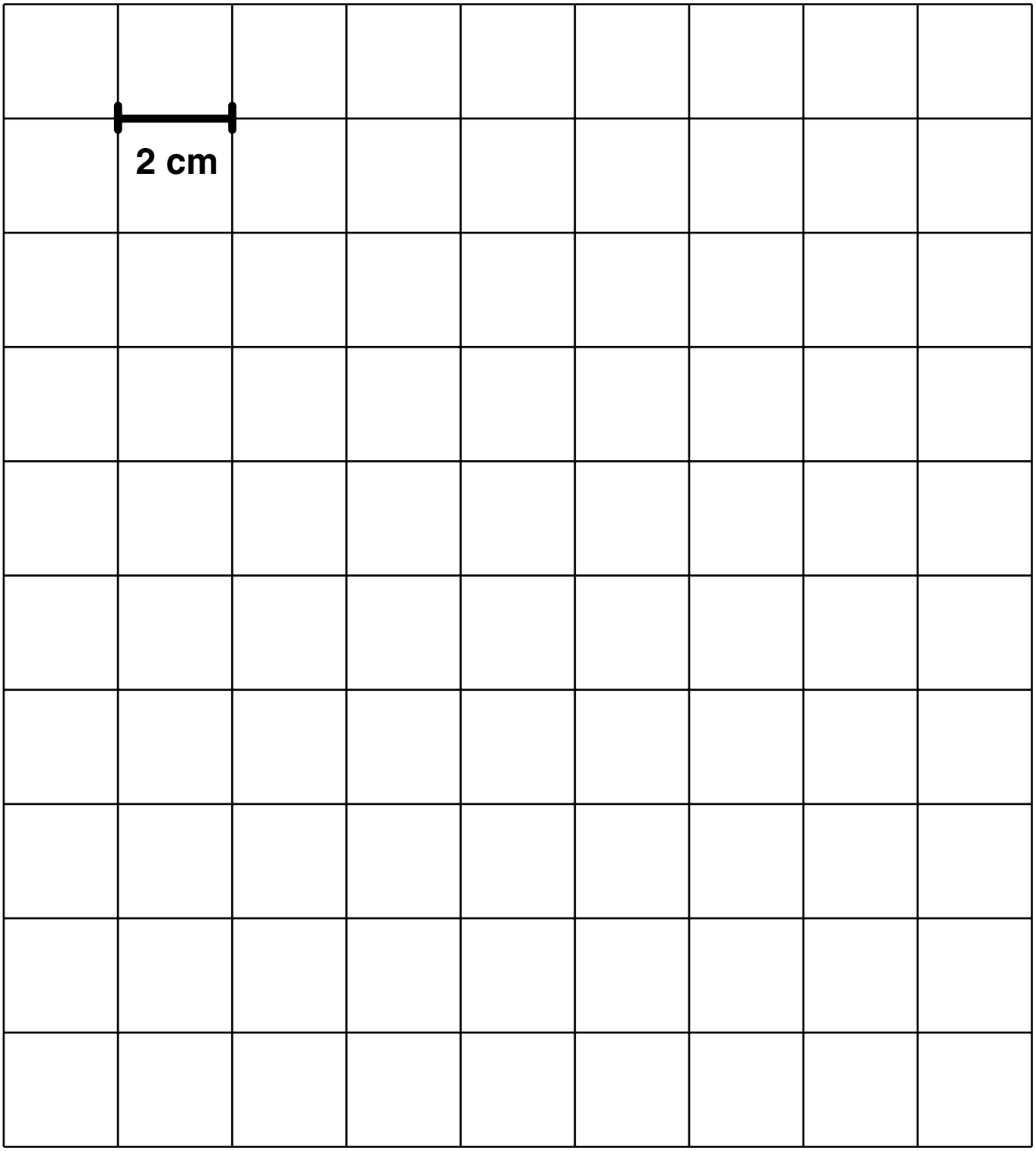
Flock is a secret number.
Flock is in this arrow picture and in this string picture.





Who is Flock? _____

Draw a red zigzag path that is 18 cm long.
Draw a blue zigzag path that is 7 cm long.
Draw a green zigzag path that is 21 cm long.



Complete these number sentences.

$(6 + 5) \times 2 =$ _____

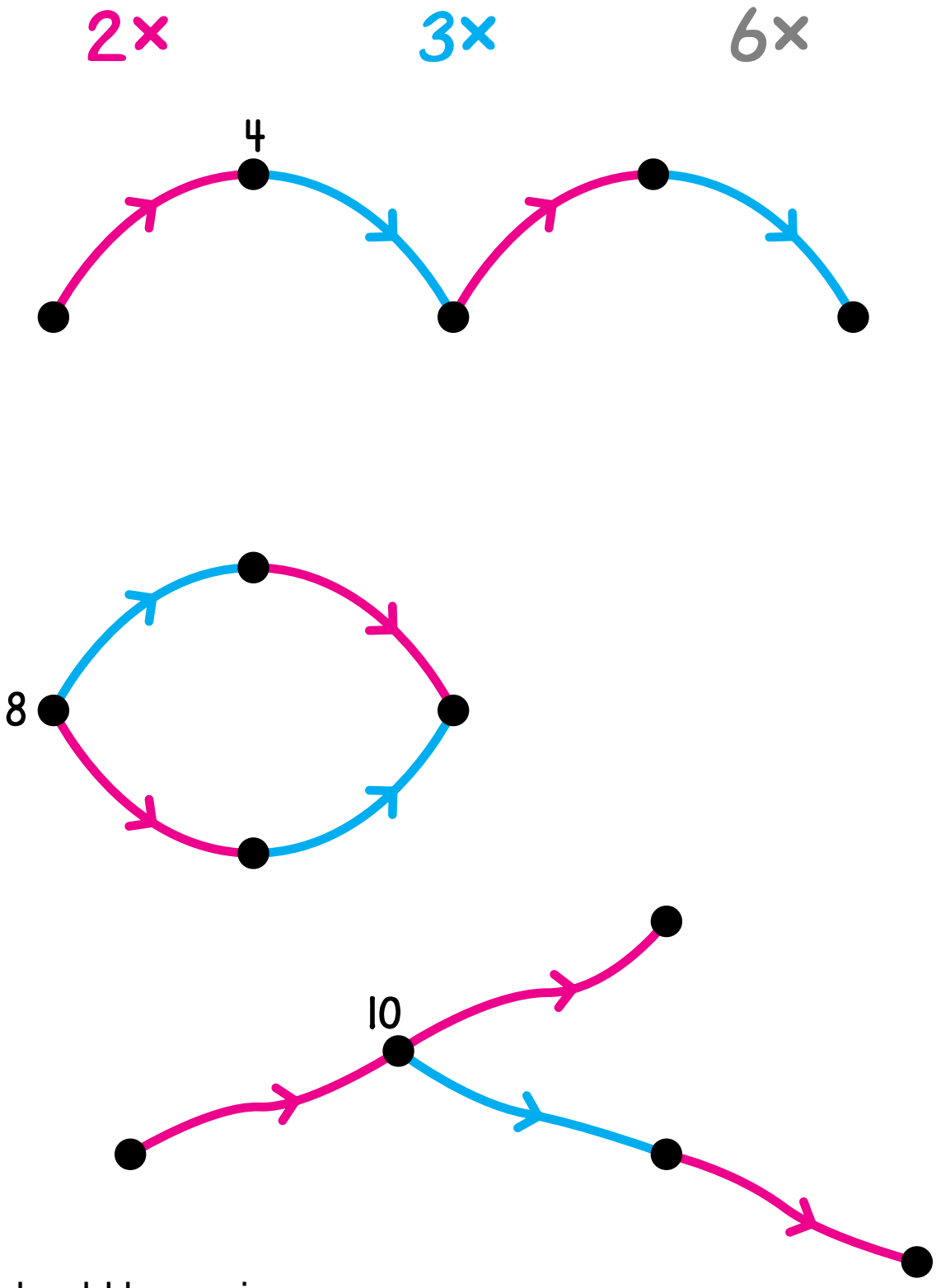
$6 + (5 \times 2) =$ _____

$(7 - 2) \times 3 =$ _____

$7 - (2 \times 3) =$ _____

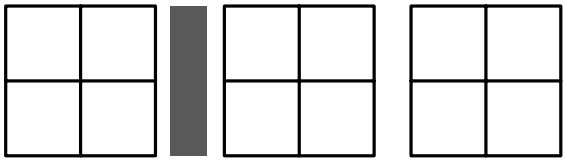
$(7 - 3) \times 2 =$ _____

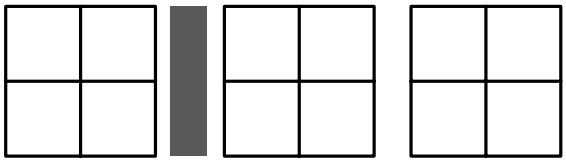
Label the dots. Draw all the possible 6x (gray) arrows.

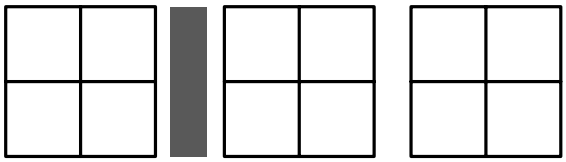


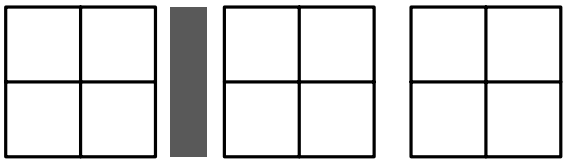
You should have six gray arrows.

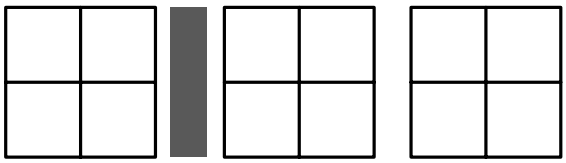
Put these numbers on the Minicomputer.

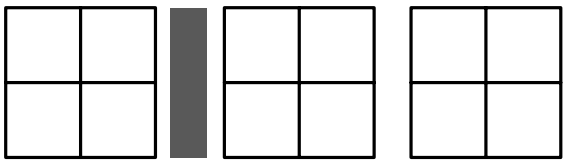
4.05 = 

8.60 = 

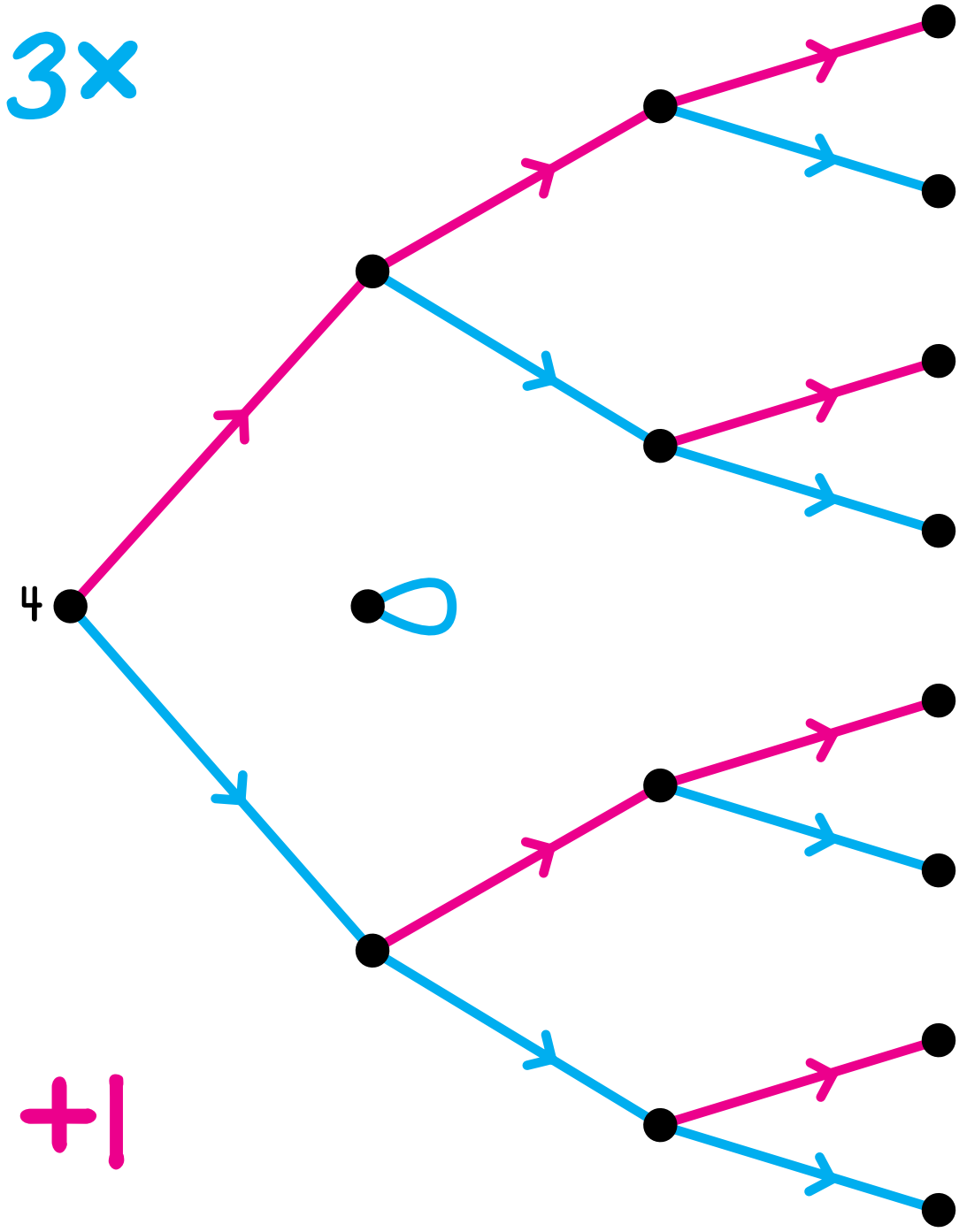
0.79 = 

3.00 = 

2.0 = 

1.4 = 

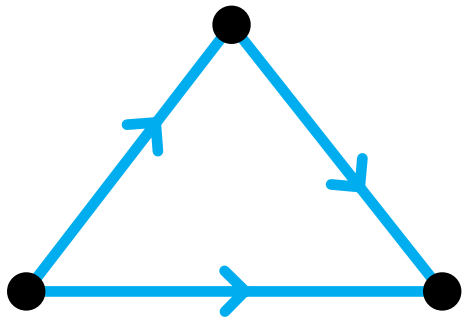
Label the dots.



Put these numbers in the arrow picture.

225 252 522

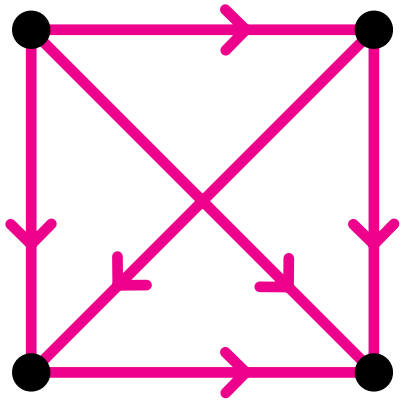
I am more than you



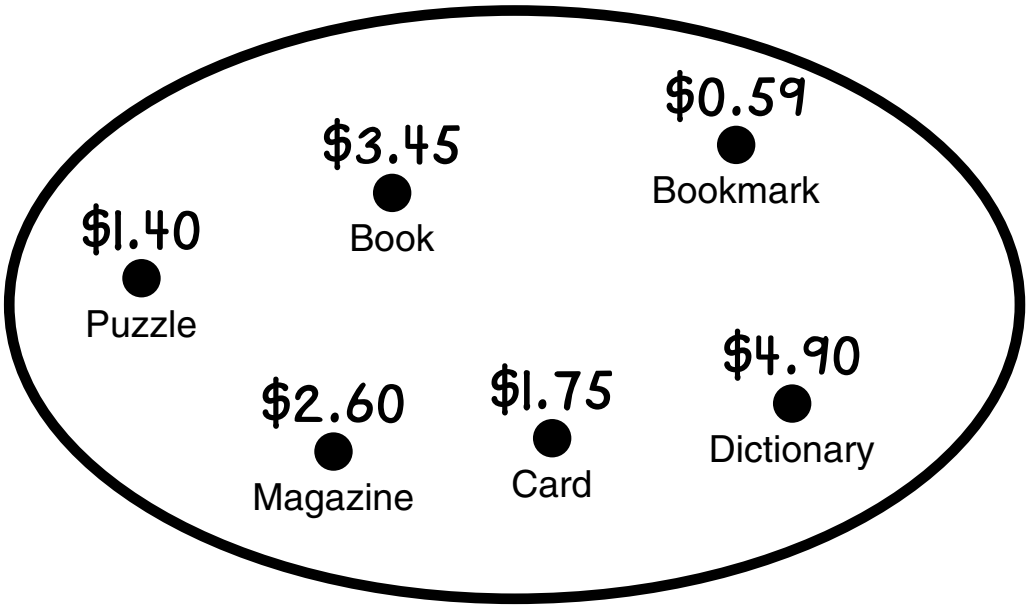
Put these numbers in the arrow picture.

390 930 309 903

I am less than you



These are the prices of some items in a book store.



Which item is the most expensive? _____
Which item is the least expensive? _____

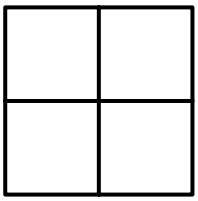
Erik bought a magazine and a card. How much did he spend? _____
He gave the clerk $5.00. How much change did he receive? _____

Maia bought three items for less than $5.00.
What could she have bought? _____

Lee bought two items and spent more than $5.00.
What could he have bought? _____

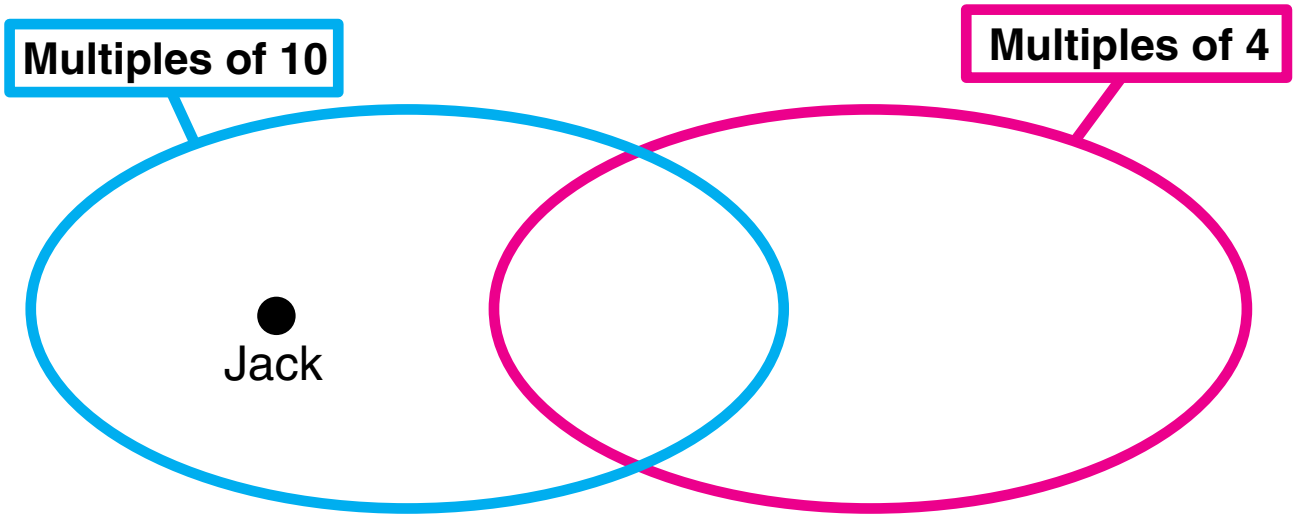
Jack is a secret number.

Jack can be put on this Minicomputer with five regular checkers all on the same square.



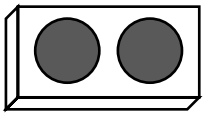
Jack could be _____, _____, _____, or _____.

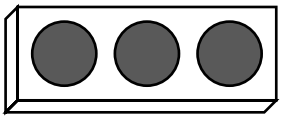
Jack is in this string picture.

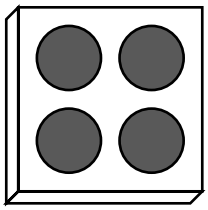


Who is Jack? _____

Suzanne wants to serve cupcakes at her club meeting. She needs exactly 15 cupcakes. The store has cupcakes in packages of two, three, or four.





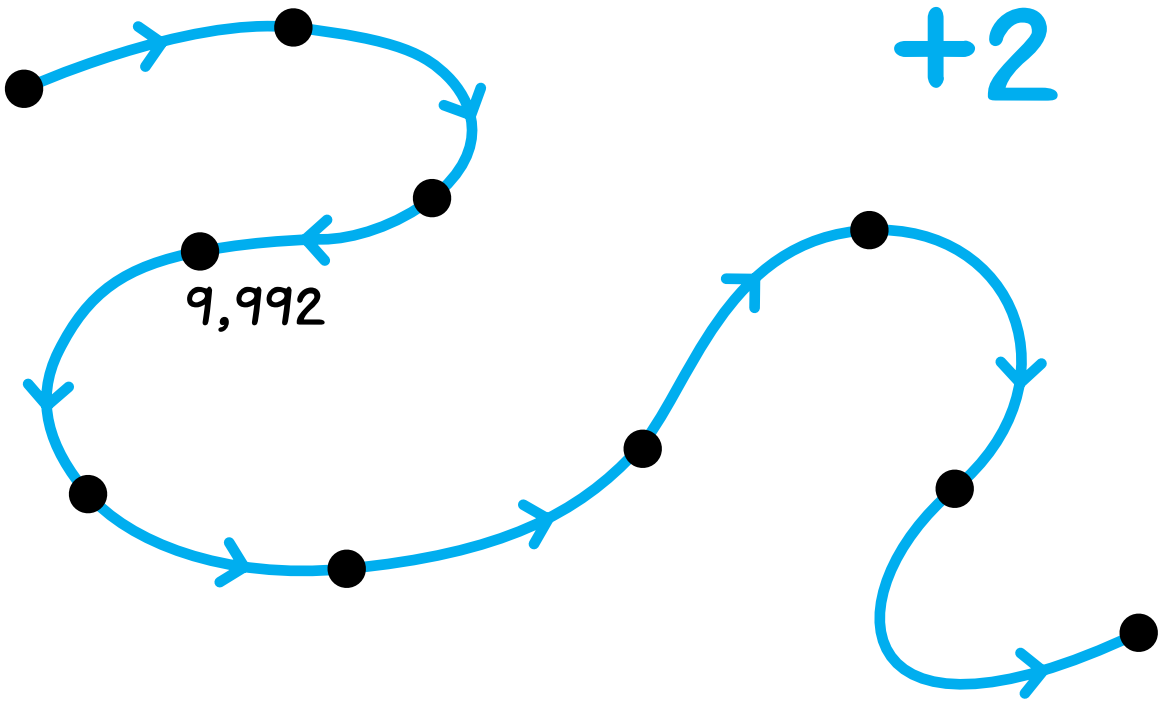


What should Suzanne buy?

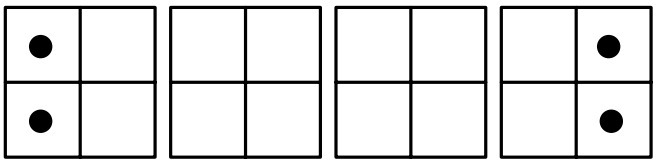
Show your solution in this box.

Can you find a different solution? Show it here.

Laty is a secret number.
Laty is in this arrow picture.

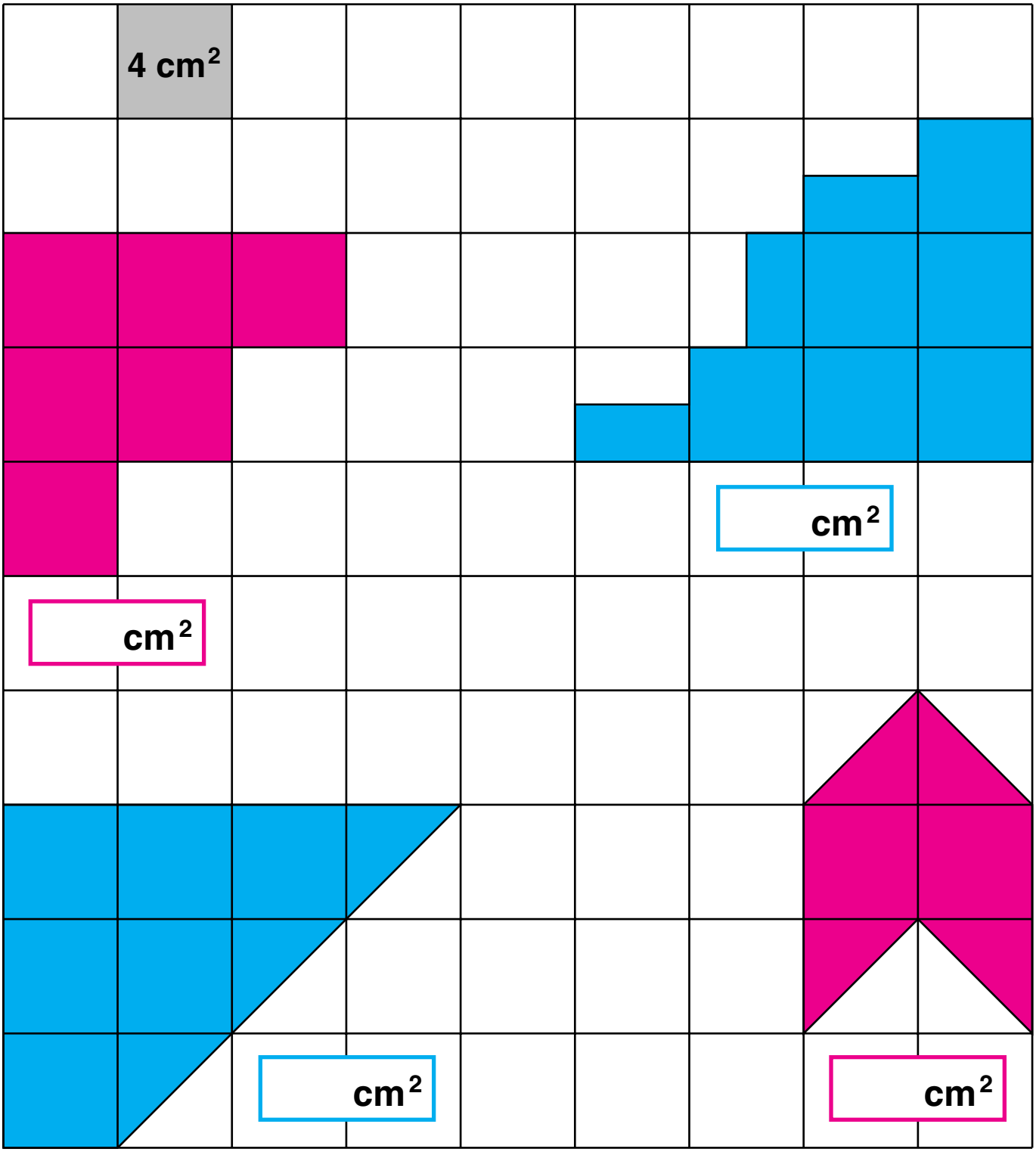


Laty can be put on this Minicomputer by moving exactly one checker.

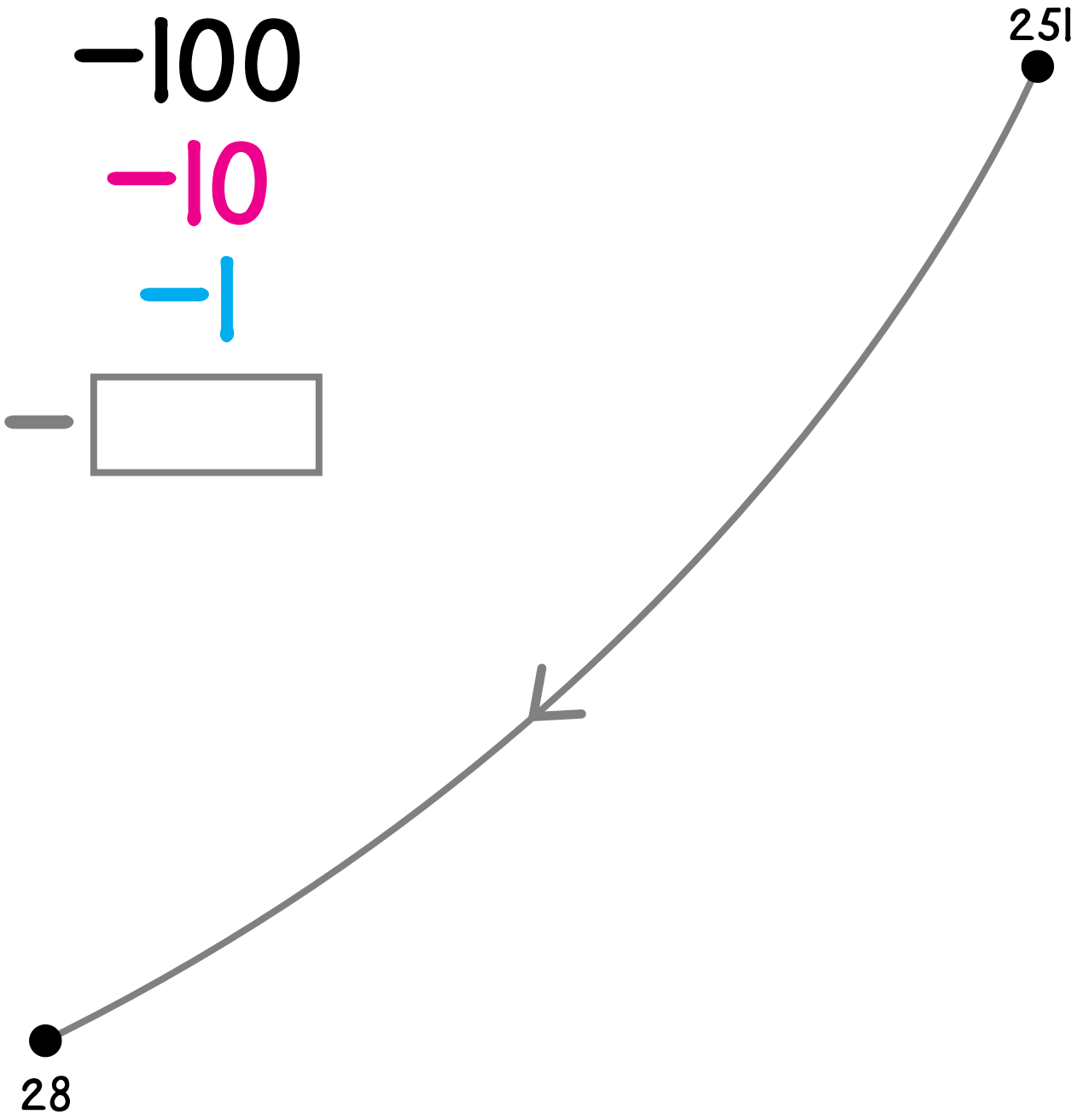


Who is Laty? _____

Find the area of each shape.

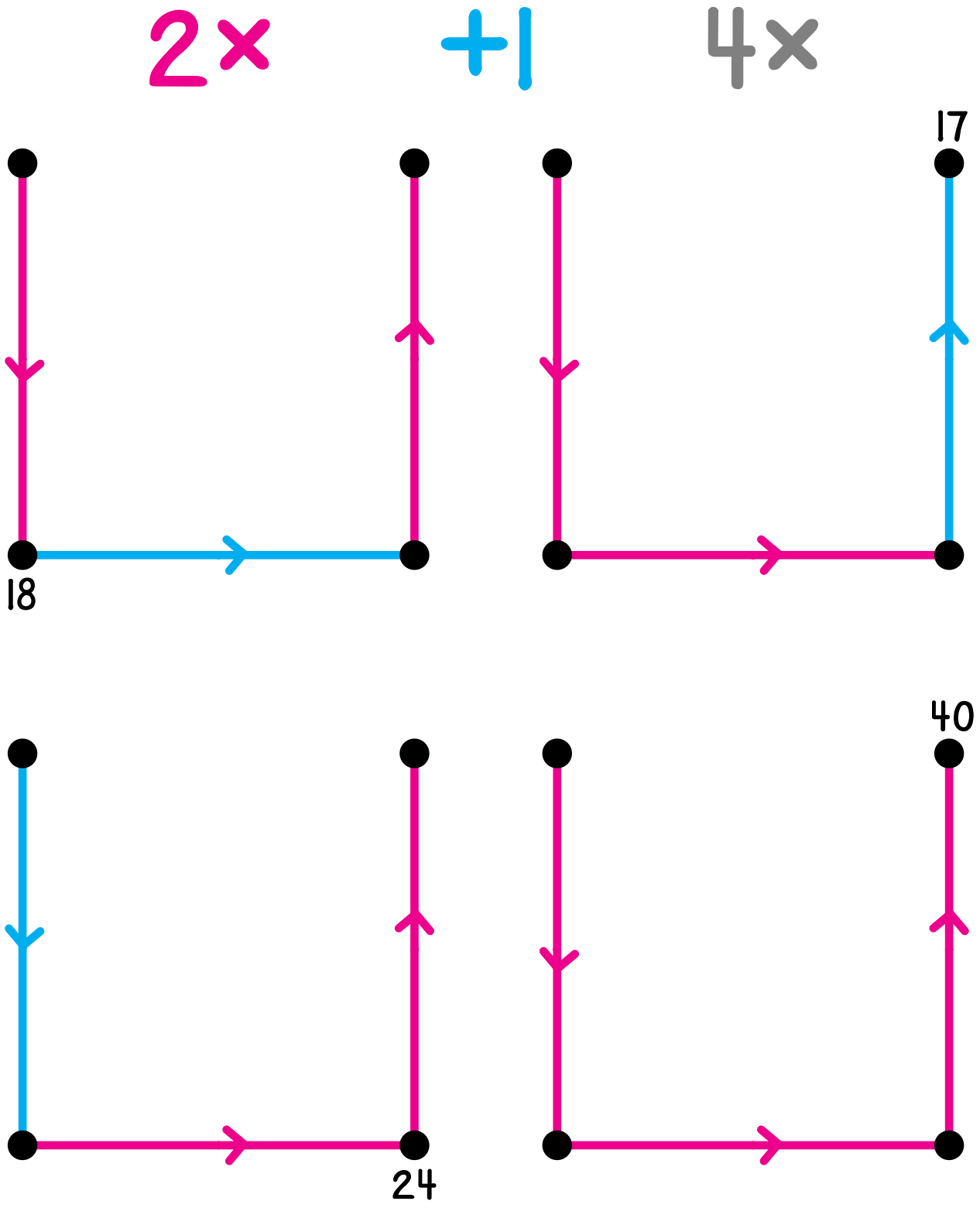


Build an arrow road from 251 to 28 using –100, –10, and –1 arrows. Fill in the box for the gray arrow.



Write a calculation shown by the gray arrow.

Label the dots. Draw all the possible 4x (gray) arrows.



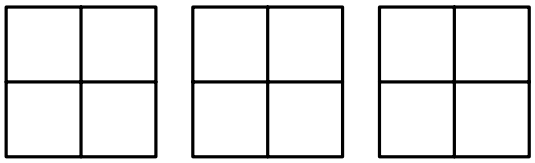
You should have four gray arrows.

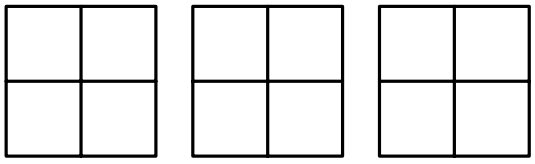
Complete.

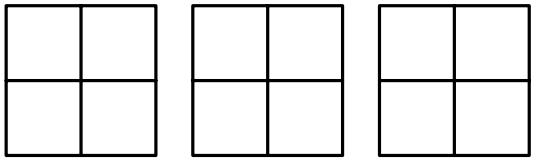
$$\begin{array}{r} 27 \\ +\quad\ \ \\ \hline 60 \end{array} \qquad \begin{array}{r} 154 \\ +\quad\ \ \\ \hline 191 \end{array}$$

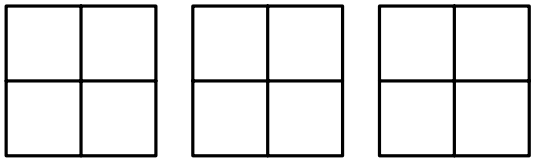
$$\begin{array}{r} 408 \\ +\quad\ \ \\ \hline 600 \end{array} \qquad \begin{array}{r} 3{,}275 \\ +\quad\ \ \\ \hline 4{,}000 \end{array}$$

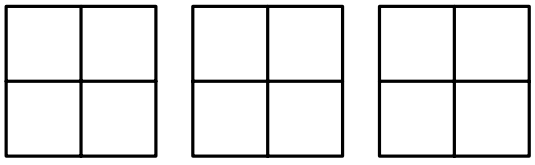
Put these numbers on the Minicomputer using exactly three checkers (positive or negative).

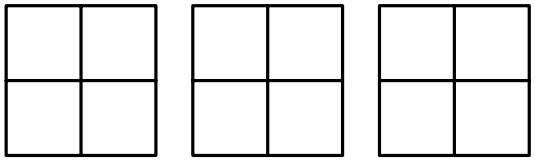
35 = 

97 = 

$\widehat{17}$ = 

56 = 

132 = 

696 = 

Build an arrow road from 0 to 312 using 10x and +1 arrows.
Use as few arrows as possible.