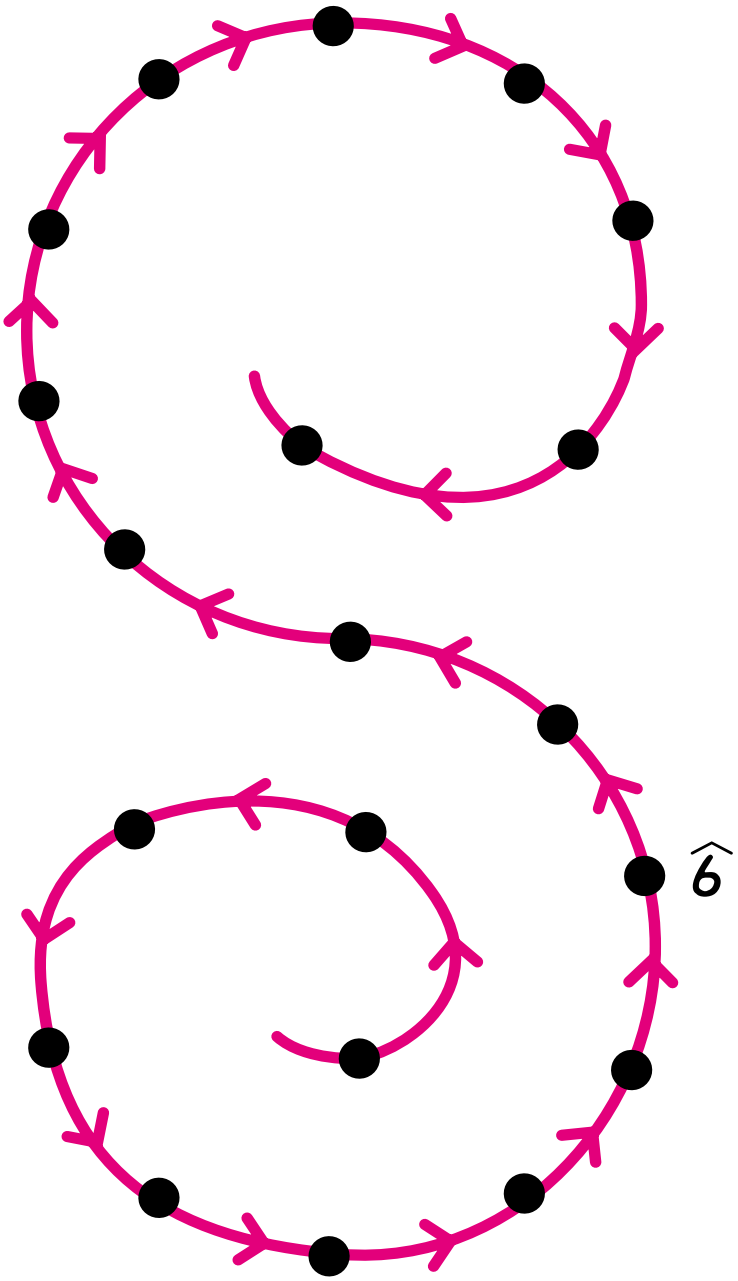
Name _____

Collection of Problems #5

Label the dots.

+6



Calculate.

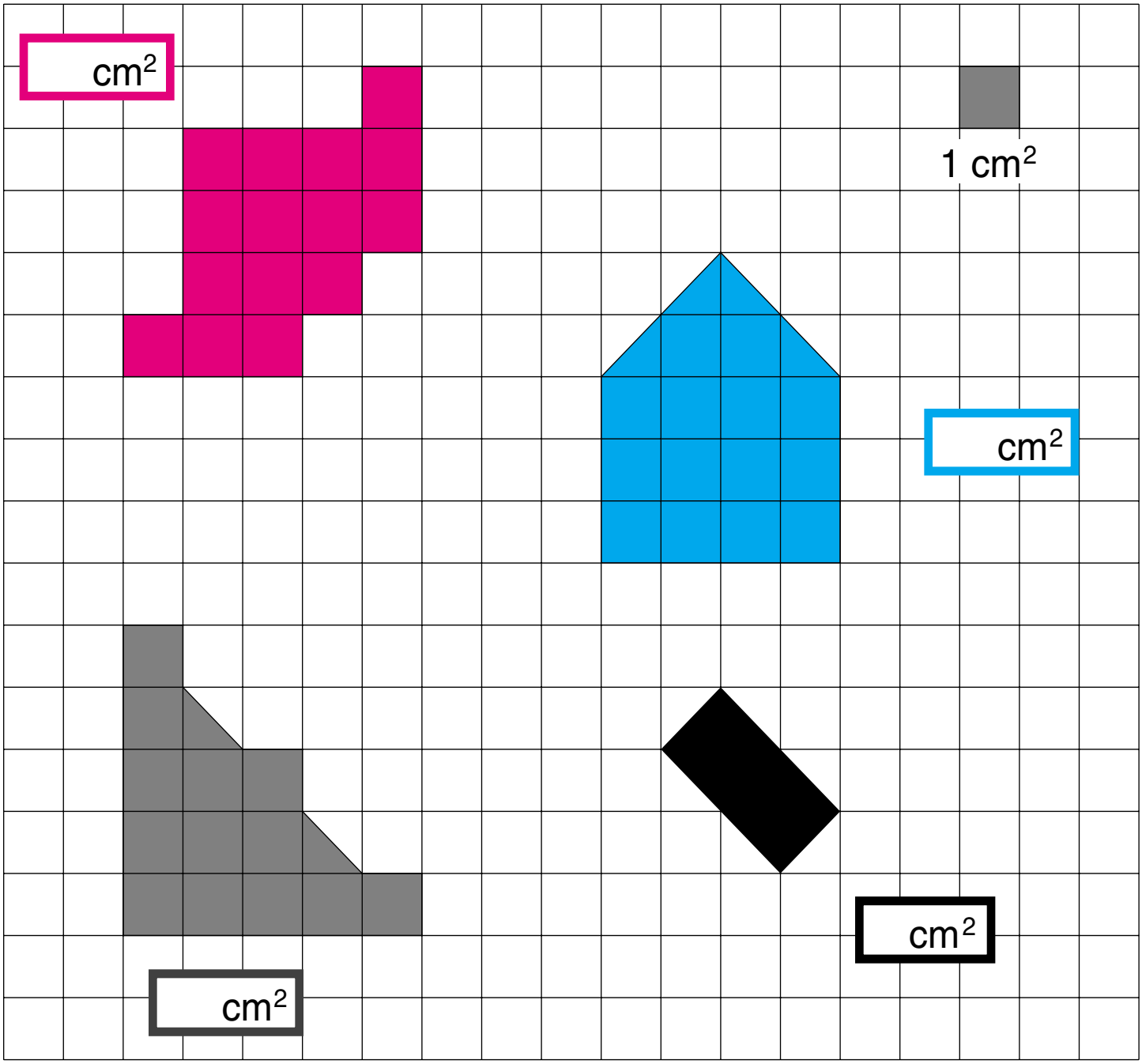
$$\begin{array}{r} 2.43 \\ +\ 8.14 \\ \hline \end{array} \qquad \begin{array}{r} 16.02 \\ +10.96 \\ \hline \end{array} \qquad \begin{array}{r} 2.84 \\ +\ 6.13 \\ \hline \end{array}$$

$$\begin{array}{r} 50.24 \\ +42.37 \\ \hline \end{array} \qquad \begin{array}{r} 67.60 \\ +38.25 \\ \hline \end{array} \qquad \begin{array}{r} 74.66 \\ +23.52 \\ \hline \end{array}$$

$$\begin{array}{r} 6.58 \\ +\ 2.43 \\ \hline \end{array} \qquad \begin{array}{r} 10.75 \\ +\ 4.27 \\ \hline \end{array} \qquad \begin{array}{r} 18.68 \\ +\ 5.19 \\ \hline \end{array}$$

$$\begin{array}{r} 6.02 \\ \times\quad 3 \\ \hline \end{array} \qquad \begin{array}{r} 3.51 \\ \times\quad 2 \\ \hline \end{array}$$

Find the area of each shape.



Look for patterns to help make these calculations easier.

$58 - 24 =$ _____

$59 - 25 =$ _____

$60 - 26 =$ _____

$62 - 28 =$ 34

$62 - 29 =$ _____

$63 - 29 =$ _____

$73 - 29 =$ _____

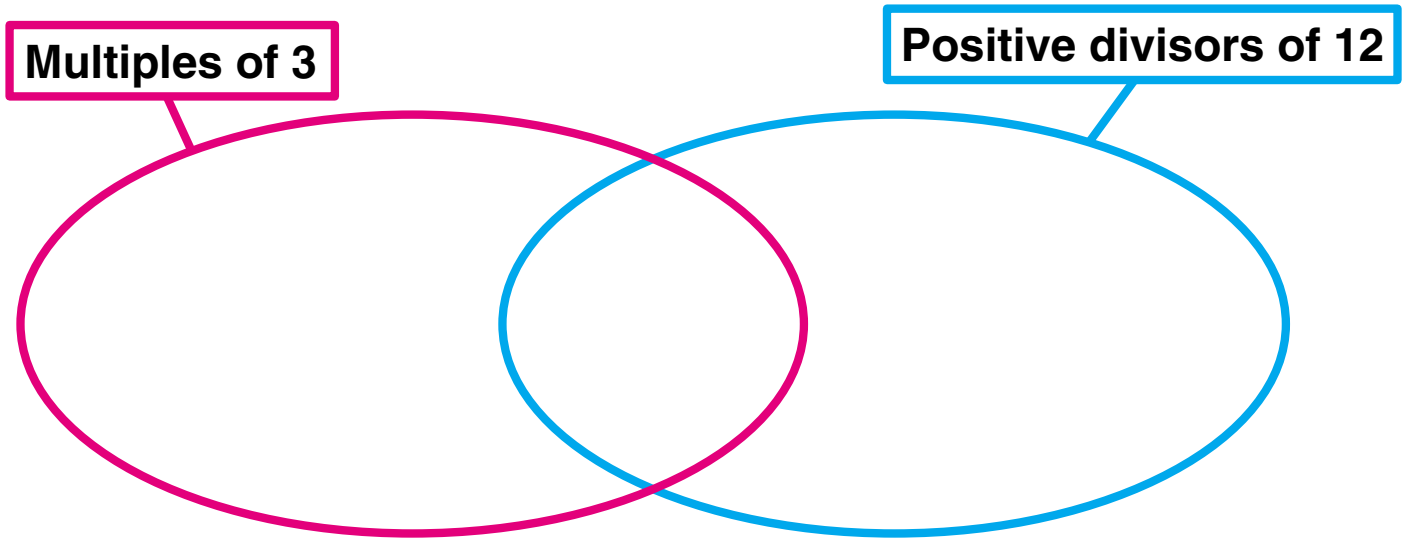
$83 - 29 =$ _____

$83 - 49 =$ _____

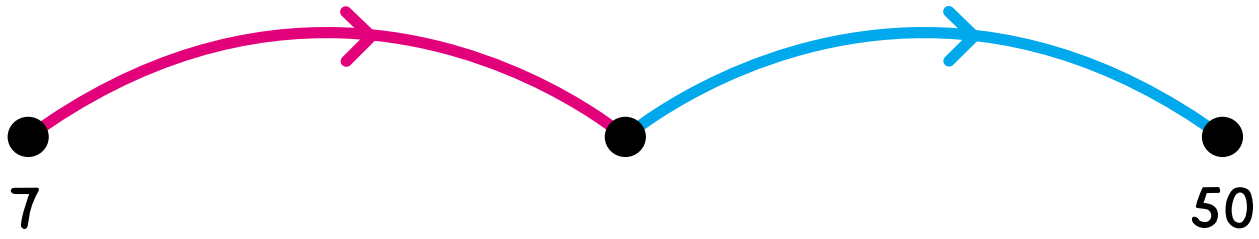
Put these numbers in the string picture.

3 4 1

5 9 12 1



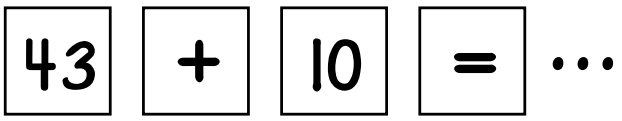
Pair the tags. One is done for you.



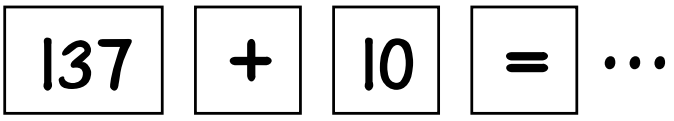
−2	×2
×3	×5
+3	+29
−10	×10
+18	+53

How Close Can You Get?

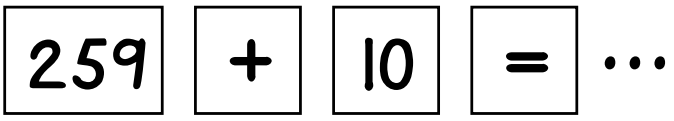
How close can you get to 106 by adding tens to 43? _____
How many tens did you add? _____



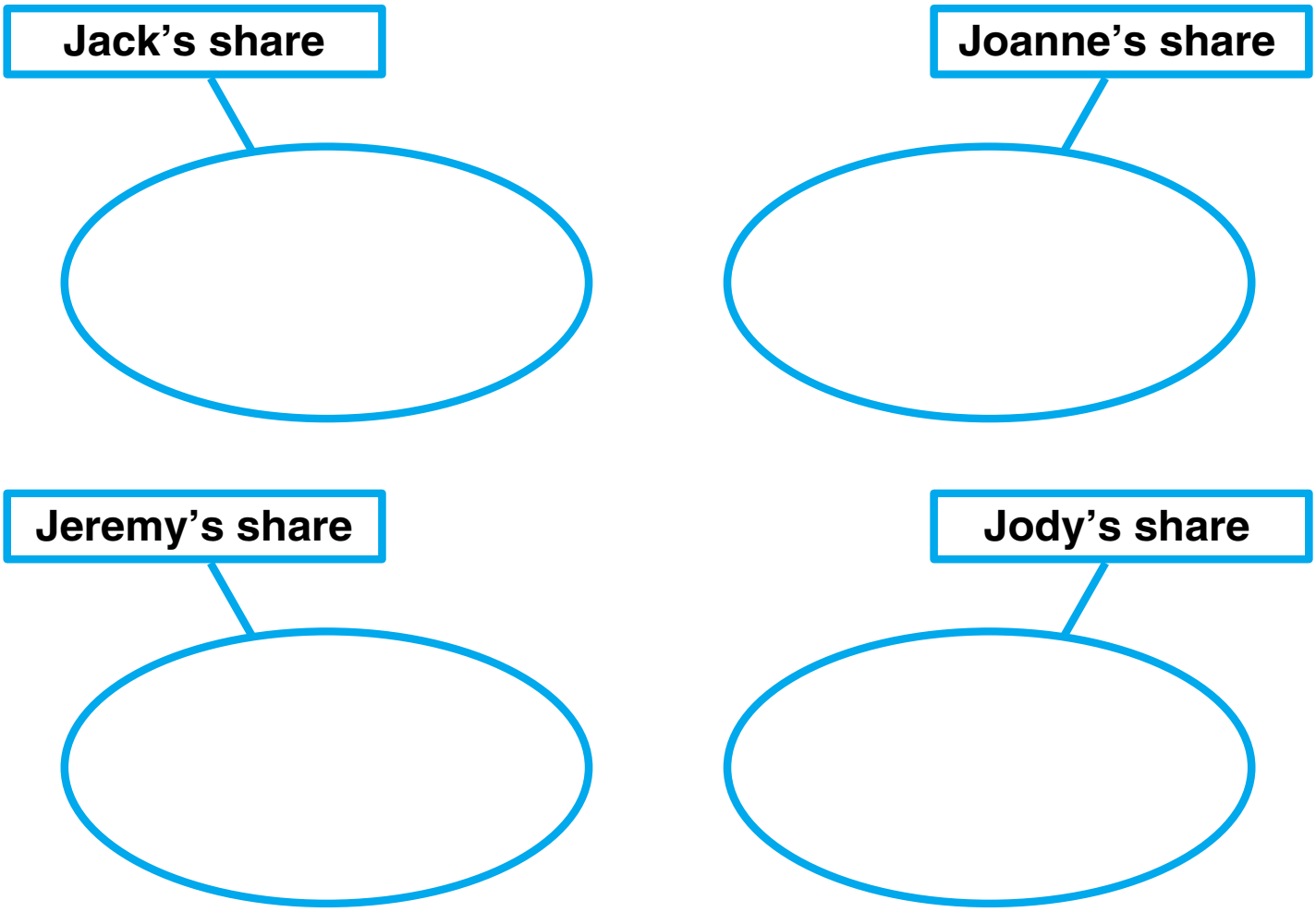
How close can you get to 251 by adding tens to 137? _____
How many tens did you add? _____



How close can you get to 306 by adding tens to 259? _____
How many tens did you add? _____



Jack, Joanne, Jeremy, and Jody want to share 700 baseball cards evenly. How many cards should each get? _____



What fraction of the baseball cards does each person get? _____

Joanne gives her share to her brother Jack. What fraction of the baseball cards does Jack have now? _____

How many cards does Jack have now? _____

Complete the calculations.

$$\begin{array}{r} 872 \\ 459 \\ +\,613 \\ \hline \end{array}$$

$635 + 481 = \_\_\_\_\_$

$\overbrace{635} + \overbrace{481} = \_\_\_\_\_$

$$\begin{array}{r} 980 \\ -\,653 \\ \hline \end{array}$$

$$\begin{array}{r} 1008 \\ -\,572 \\ \hline \end{array}$$

$$\begin{array}{r} 357 \\ \times\ \ 6 \\ \hline \end{array}$$

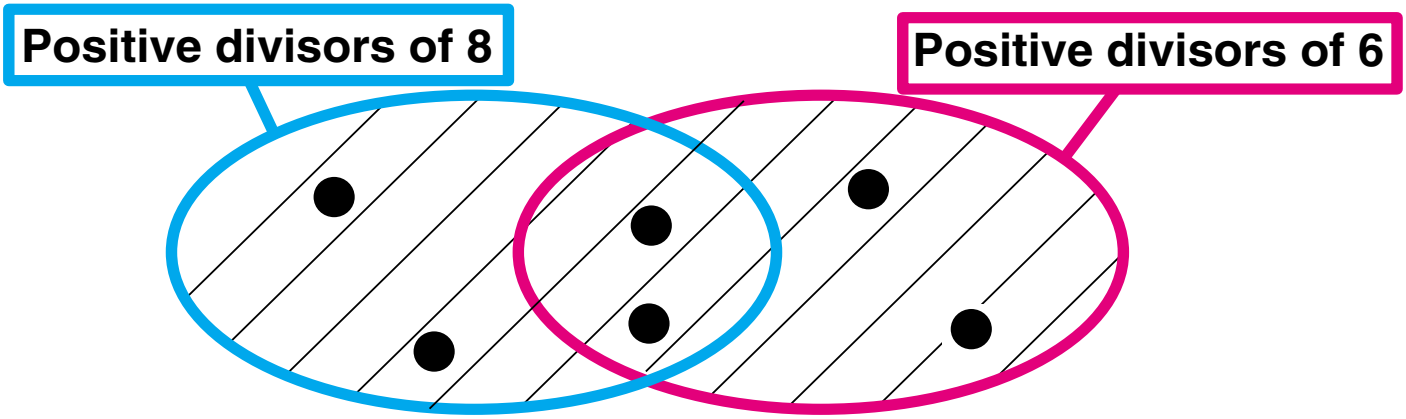
$$\begin{array}{r} 824 \\ \times\ \ 7 \\ \hline \end{array}$$

$315 \div 3 = \_\_\_\_\_$

Liv is a secret number.

Clue 1

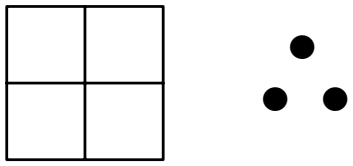
One of these six dots is for Liv. Label the dots.



Liv could be _____, _____, _____, _____, _____, or _____.

Clue 2

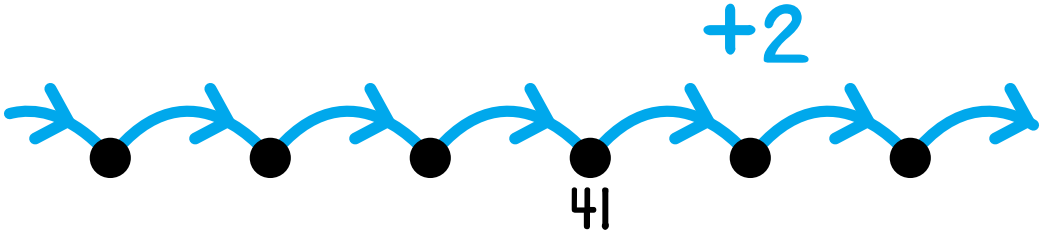
Liv can be put on this Minicomputer with three regular checkers on the same square.



Liv could be _____ or _____.

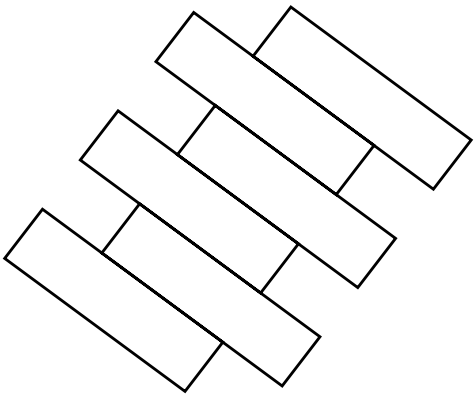
Clue 3

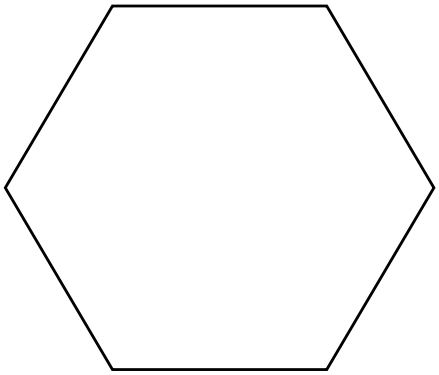
Liv is on the +2 arrow road that meets the number 41.



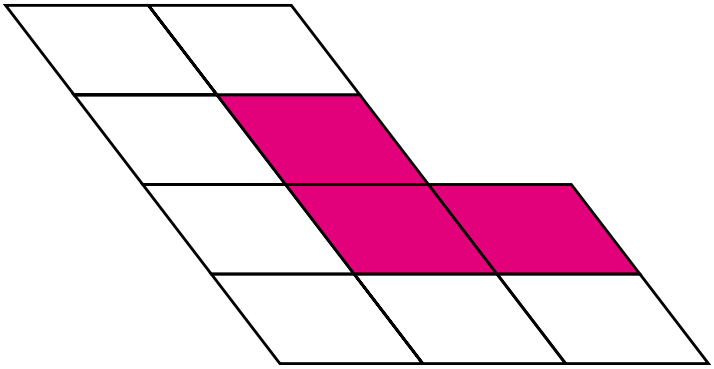
Who is Liv? _____

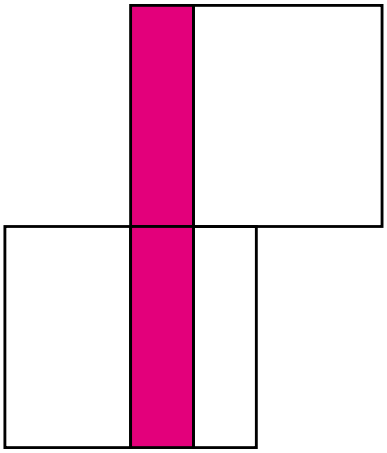
Color five-sixths ($\frac{5}{6}$) of each shape blue.





What fractional part of each shape is colored red?

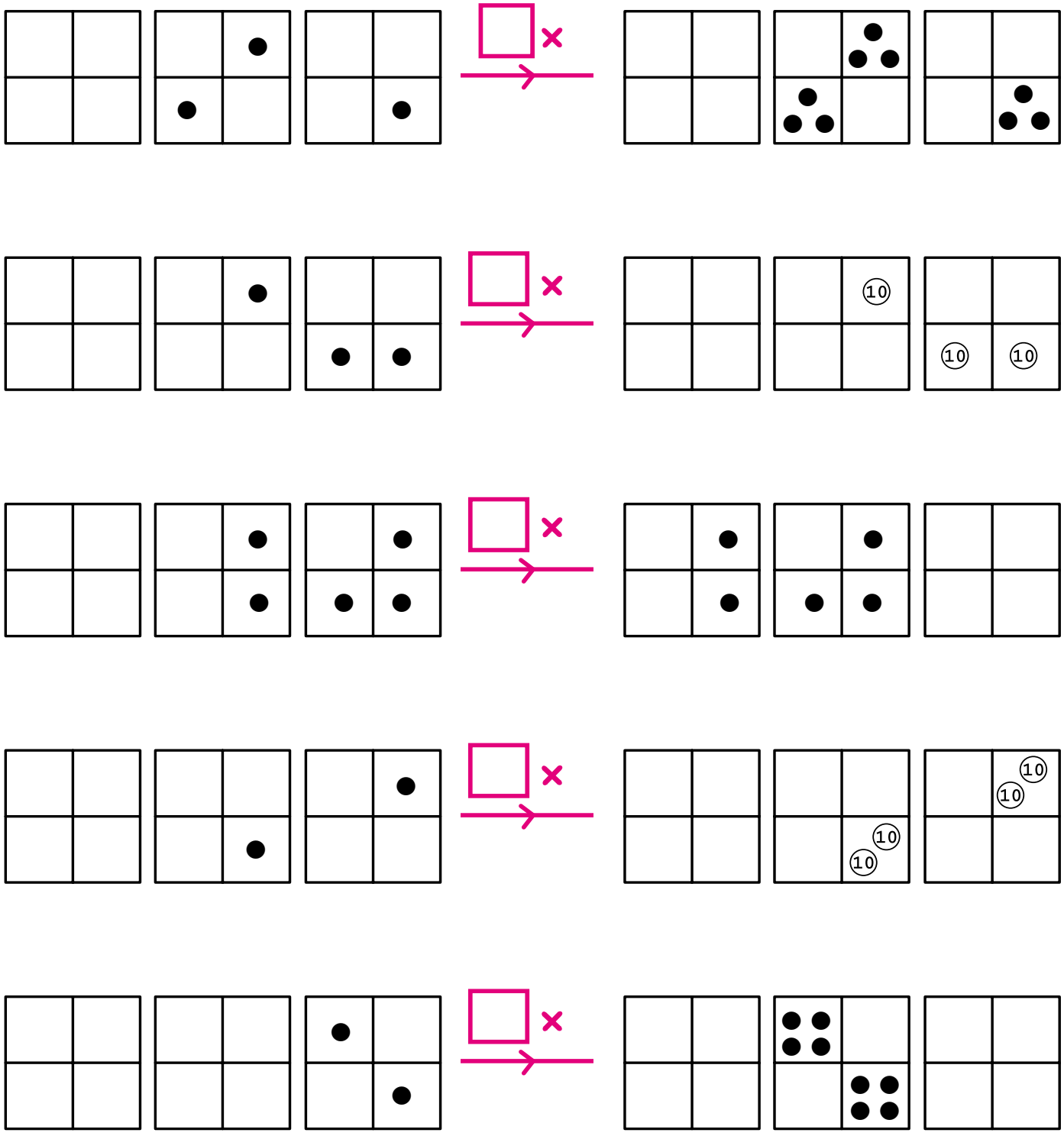




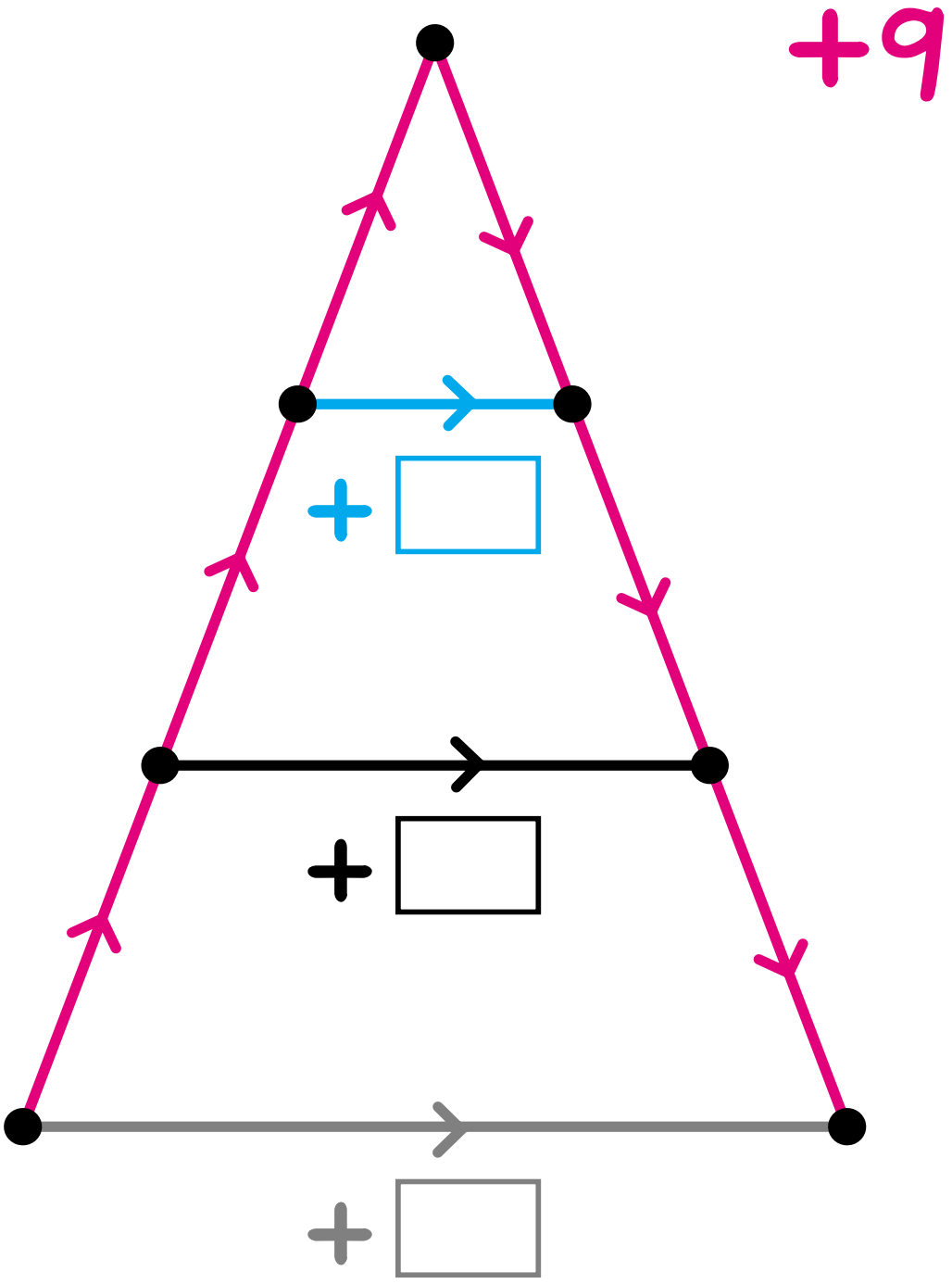
_____

_____

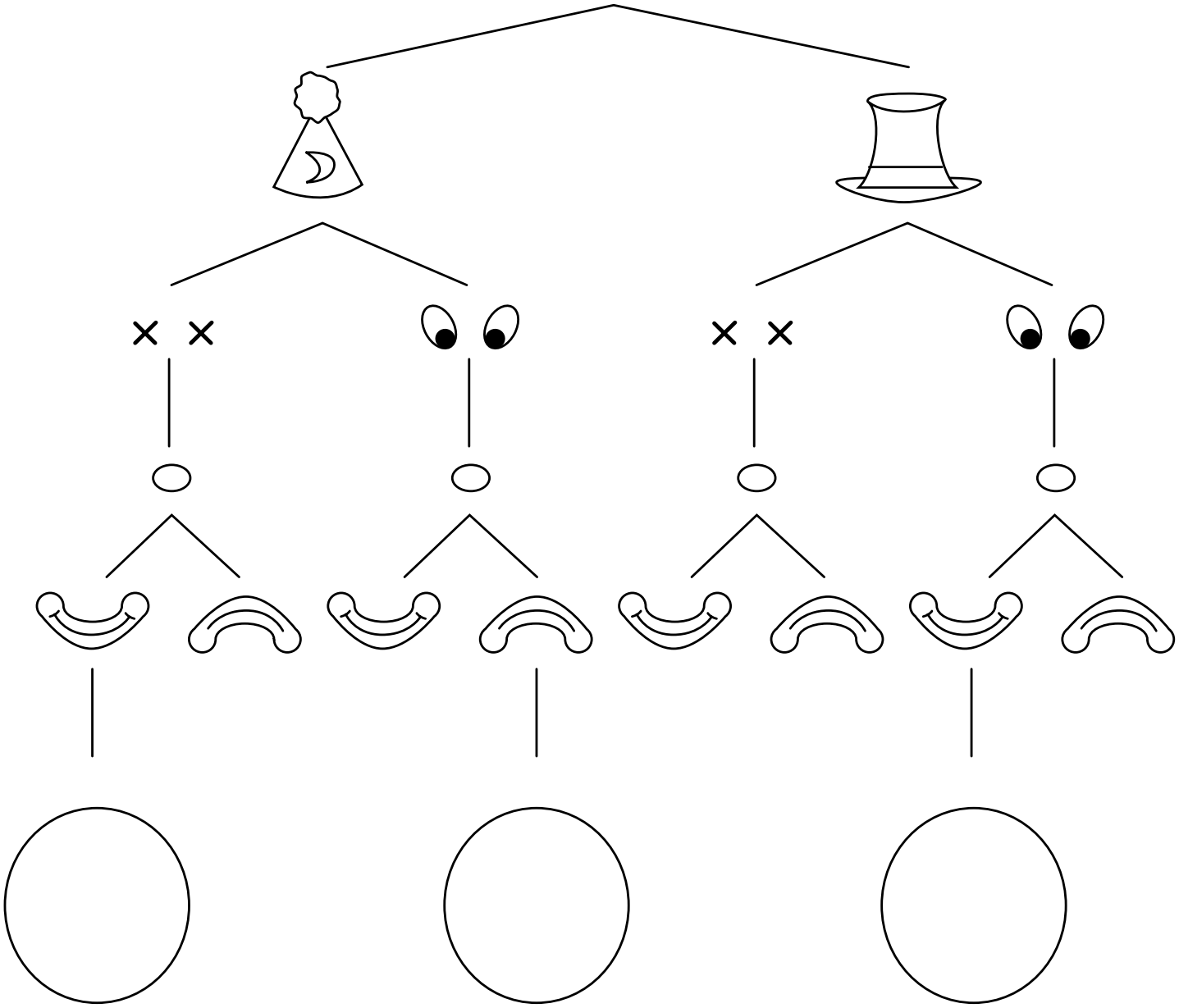
Label the arrows.



Label the blue, black, and gray arrows.



This tree shows some ways to design a clown's face. There are two choices of hats, two choices of eyes, one choice of nose, and two choices of mouths. Following the tree, draw three of the possible clown faces on the ovals provided.

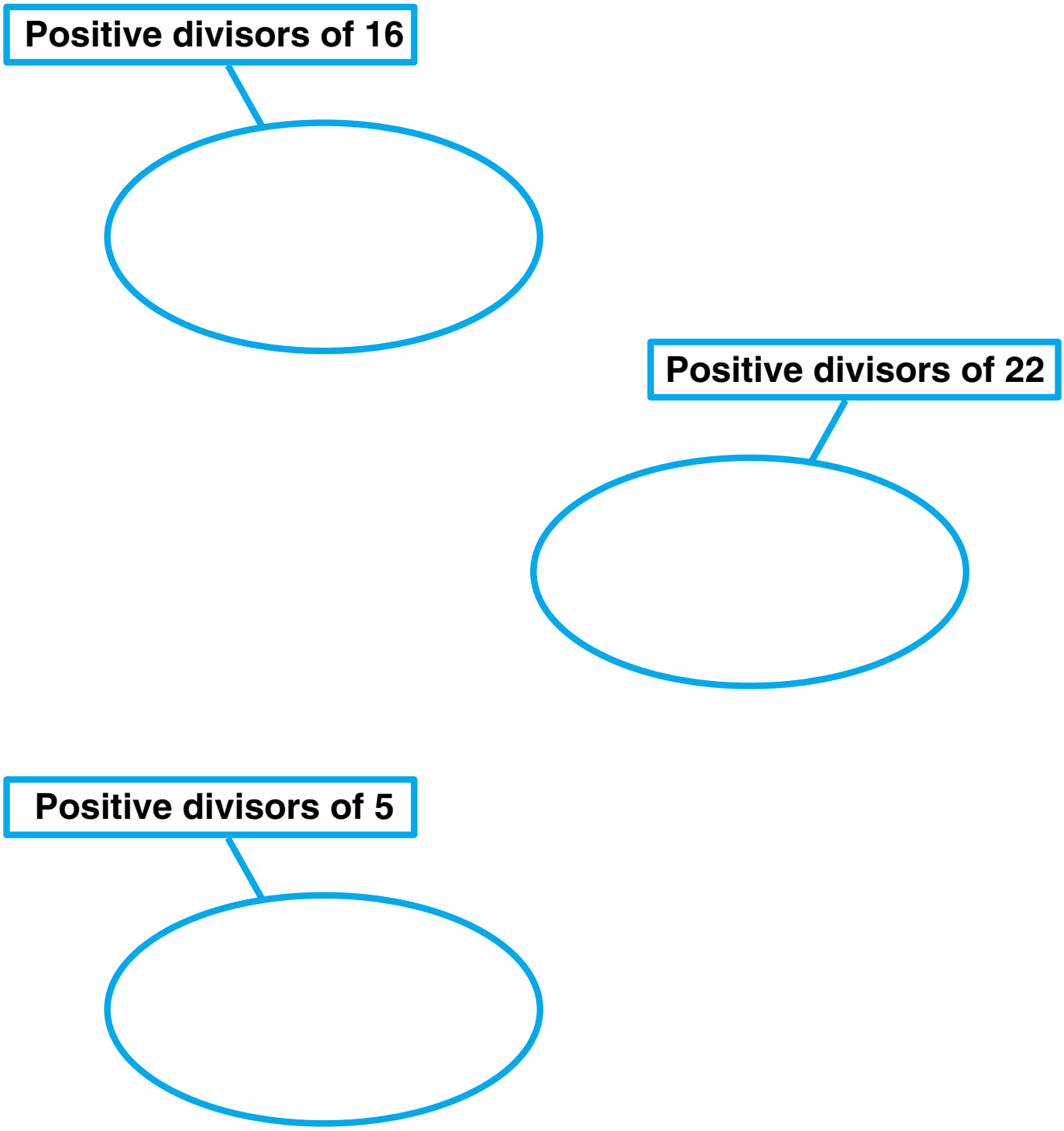


How many different clown faces could you draw with these choices? _____

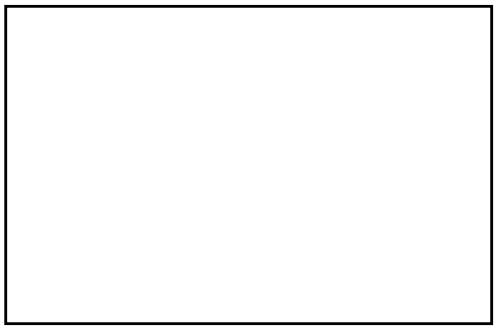
Fill in the boxes.

$15 \times 23 = 345$	$10 \times 17 =$ ☐
$16 \times 23 =$ ☐	$2 \times 17 =$ ☐
$17 \times 23 =$ ☐	$12 \times 17 =$ ☐
$18 \times 23 =$ ☐	$20 \times 17 =$ ☐
$2 \times 35 =$ ☐	$4 \times 29 =$ ☐
$20 \times 35 =$ ☐	$40 \times 29 =$ ☐
$7 \times 8 =$ ☐	$6 \times 9 =$ ☐
$7 \times 80 =$ ☐	$6 \times 90 =$ ☐
$70 \times 8 =$ ☐	$60 \times 9 =$ ☐

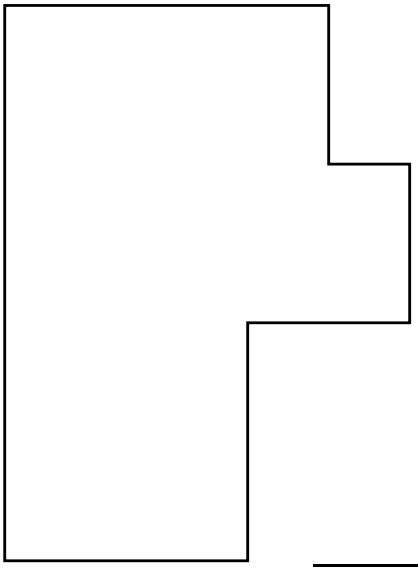
Write all the positive divisors of each number in the appropriate strings.



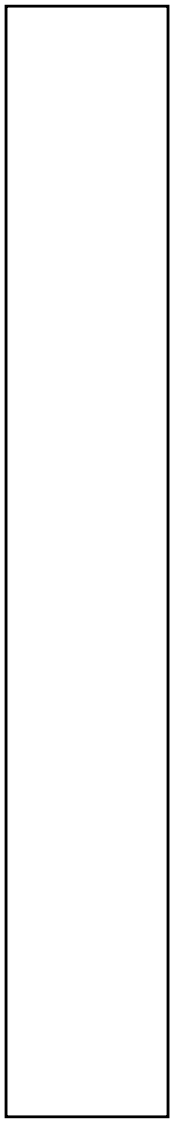
Use a ruler to find the perimeter of each shape.



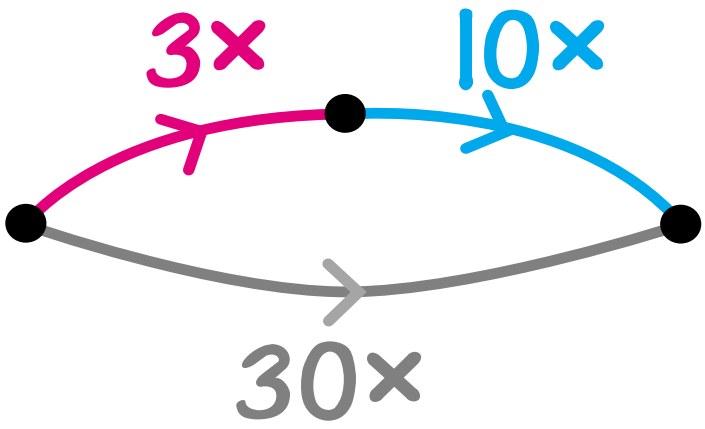
_____ cm



_____ cm



_____ cm



Do these calculations. This arrow picture can help you.

$30 \times 12 =$ _____

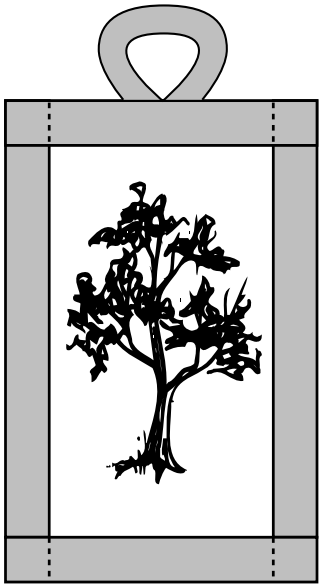
$30 \times 45 =$ _____

$30 \times 91 =$ _____

$30 \times 80 =$ _____

$30 \times 0.70 =$ _____

Vanessa is making ribbon frames for some pictures. For each frame, she needs the following:



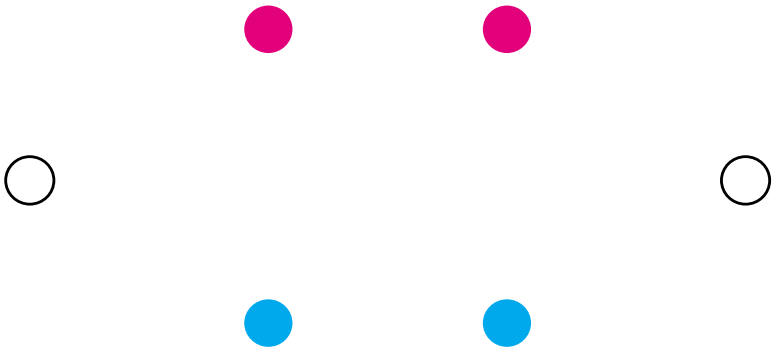
two pieces 4 cm long (top and bottom)
two pieces 6 cm long (sides)
one piece 3 cm long (loop)

Vanessa wants to make 14 frames. How many pieces of each length does she need to cut?

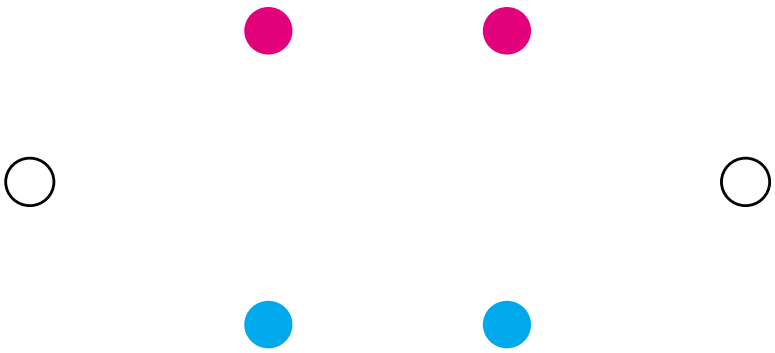
_____ pieces 4 cm long
_____ pieces 6 cm long
_____ piece 3 cm long

How many centimeters of ribbon does she need altogether?_____
Show your work below.

How many ways are there to select two marbles of the same color from a set with two white, two red, and two blue marbles? _____ Show them below.



How many ways are there to select two marbles of different colors? _____ Show them below.

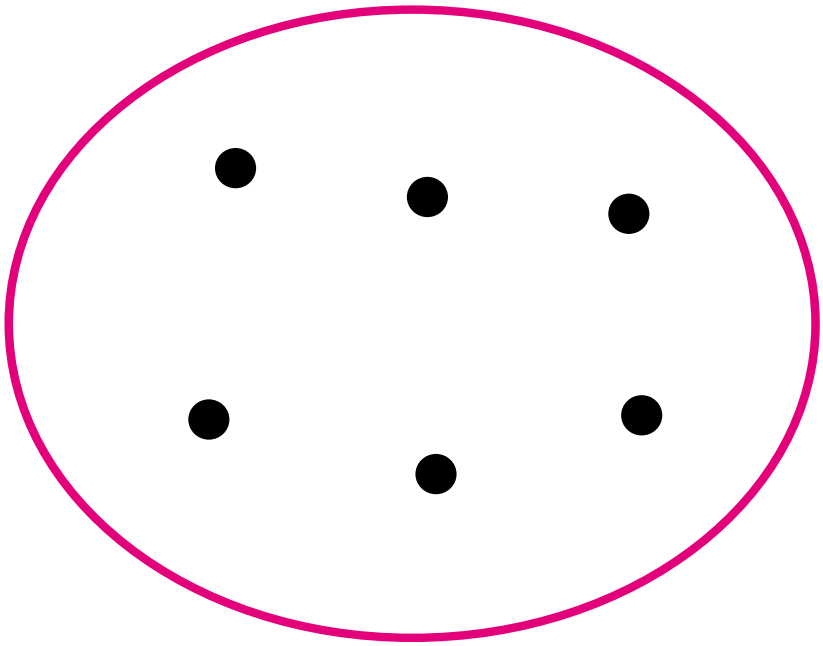


If two marbles are selected randomly, what is the probability that they will be the same color? _____

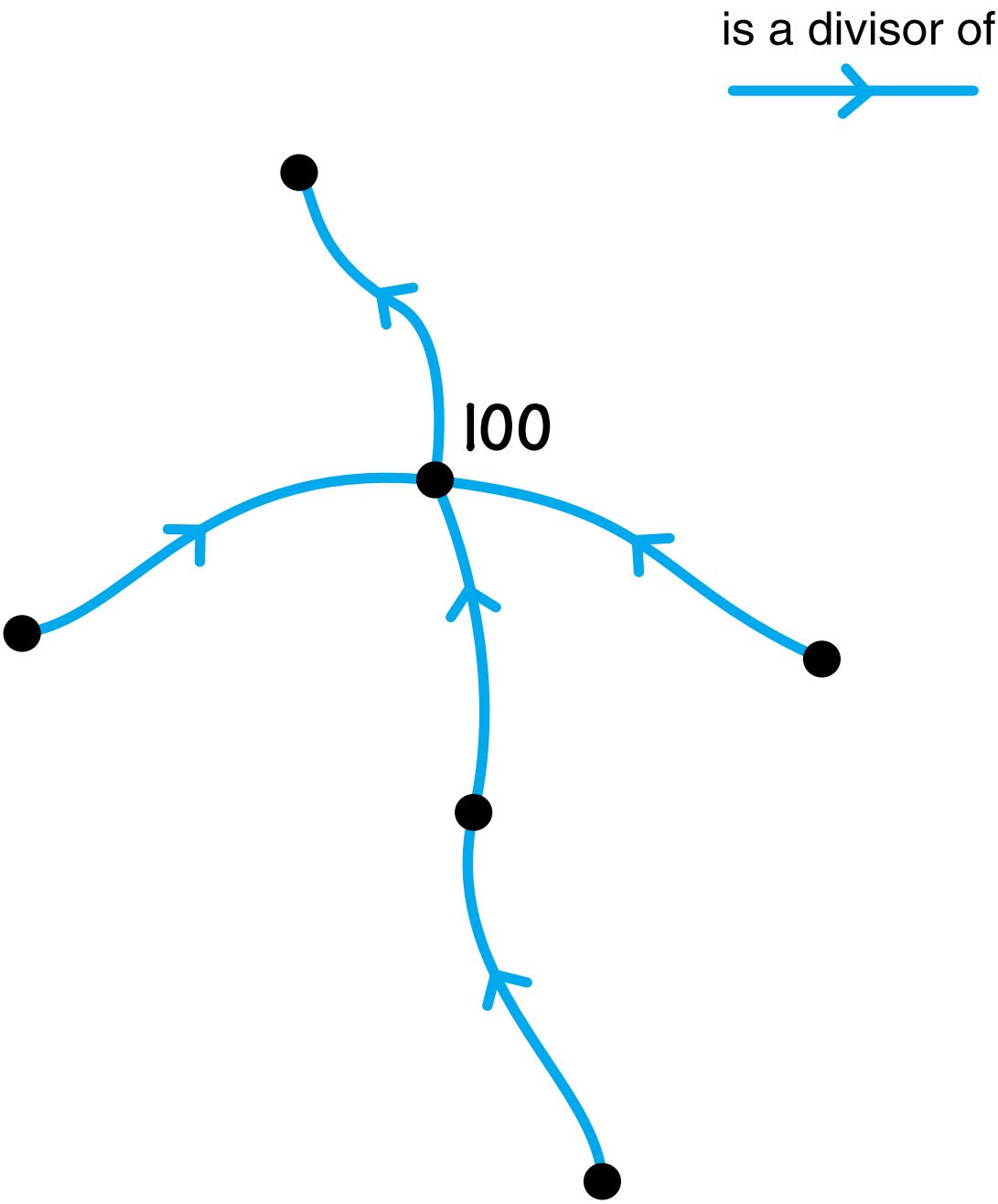
What is the probability that they will be different colors? _____

Label the six dots with whole numbers so that

- all the numbers are multiples of 7;
- at least one number is greater than 100; and
- exactly two numbers are between 50 and 80.



Label the dots. Many solutions are possible.



Carnival Rides

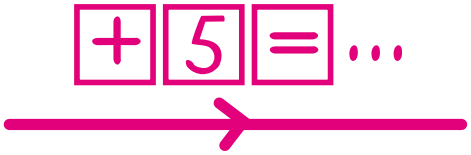
Cynthia has $6.00 to spend on carnival rides. Most rides cost 75¢ and a few rides cost 45¢. How could she spend her money? Cynthia wants to have no more than 40¢ left over. Find several solutions.

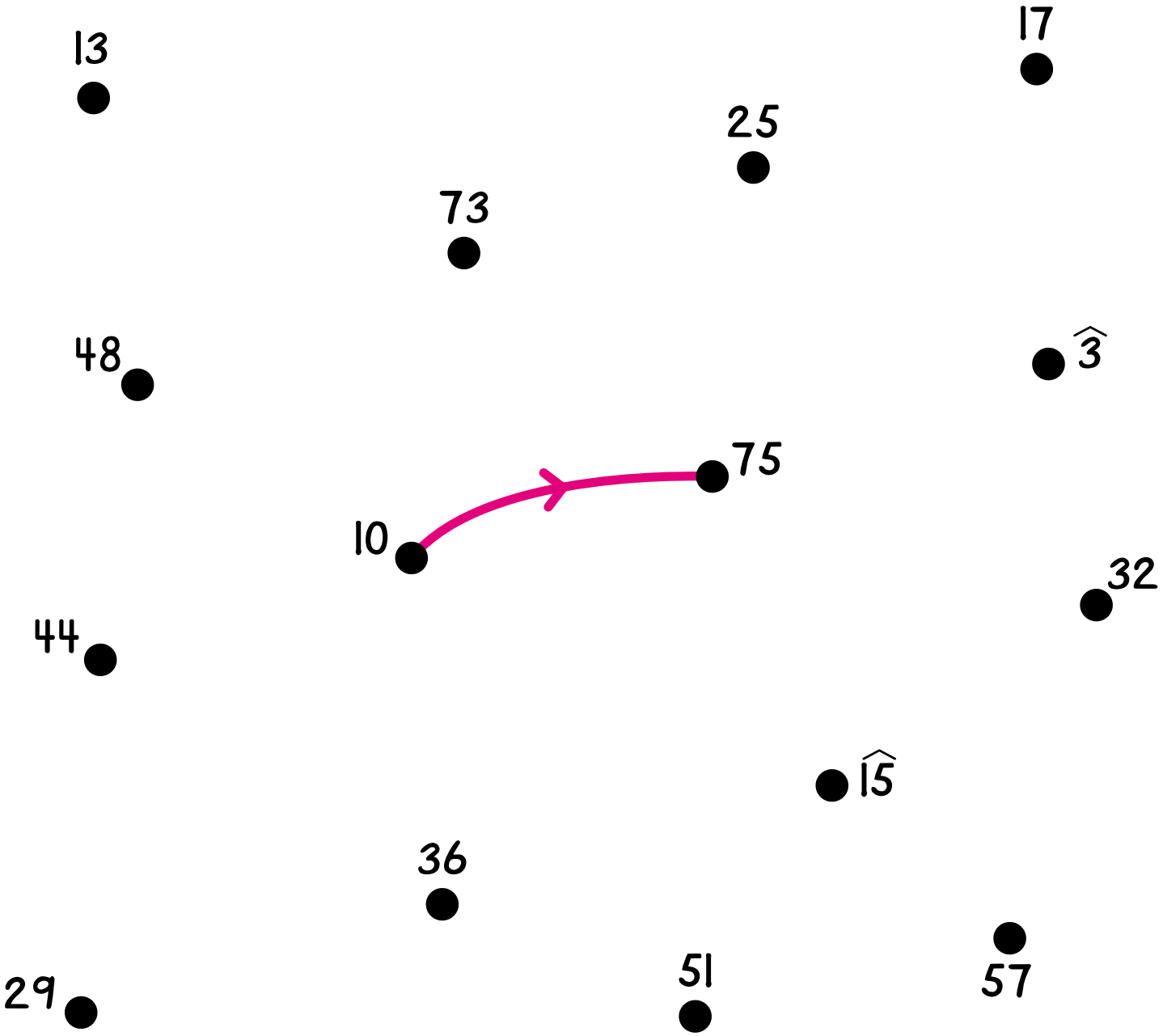
75¢ Rides	45¢ Rides	Money Left Over

Cynthia chooses the same number of 75¢ rides and 45¢ rides. How many of each does she ride? _____

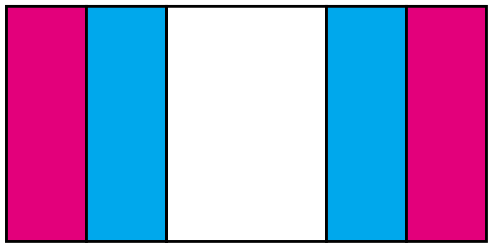
Does she have any money left over? _____

Draw as many red arrows as possible. One arrow is drawn for you.





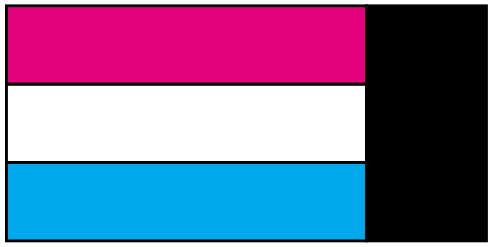
These are the two flags that the Around the World Club decided they liked best for their clubhouse. They will vote next week on which one to use.



One-third of this flag is white.

What fraction of the flag is blue? _____

What fraction of the flag is red? _____



One-fourth of this flag is black.

What fraction of the flag is blue? _____

What fraction of the flag is red? _____

What fraction of the flag is white? _____

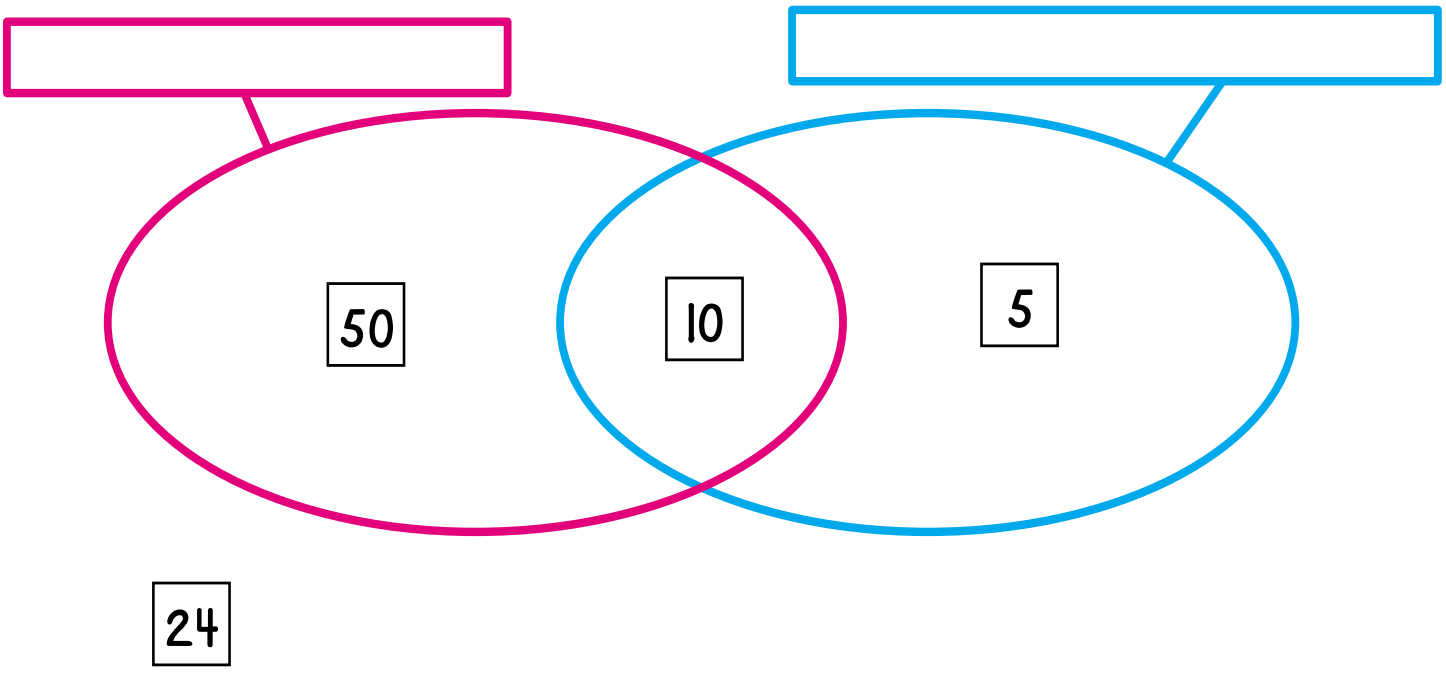
The red tag is one of these:

Multiples of 2
Multiples of 3
Multiples of 5
Multiples of 10
More than 10
Less than 50
Positive divisors of 12
Positive divisors of 20

The blue tag is one of these:

Multiples of 2
Multiples of 3
Multiples of 5
Multiples of 10
More than 10
Less than 50
Positive divisors of 12
Positive divisors of 20

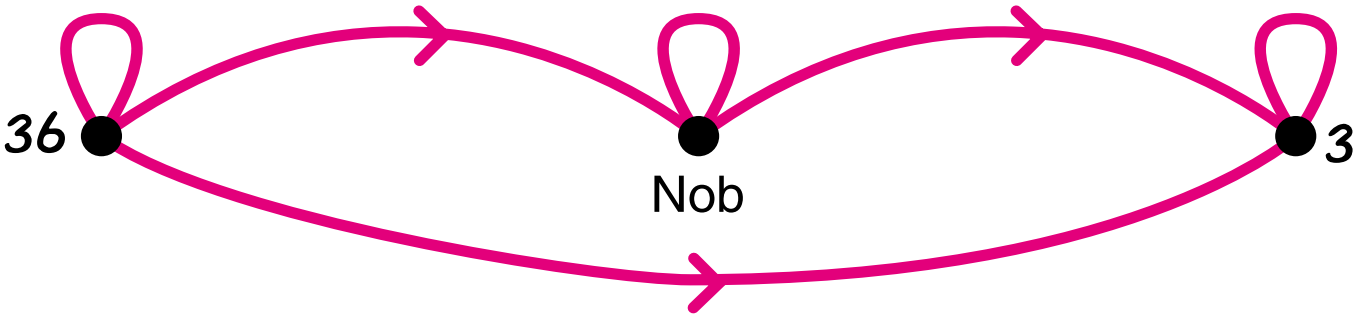
Label the strings.



Nob is a secret positive number.

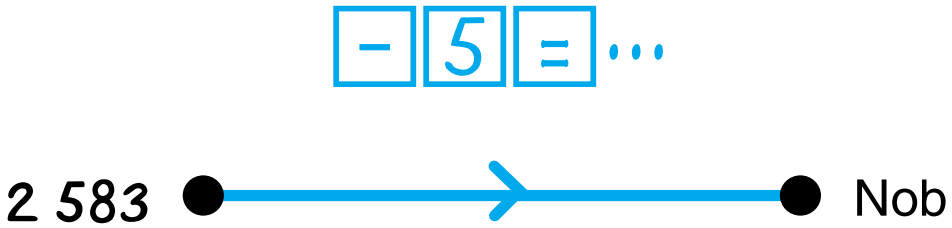
Clue 1

is a multiple of



Nob could be _____, _____, _____, or _____.

Clue 2



Who is Nob? _____

The 1948 Presidential Election

The chart below gives the results of the 1948 election for the president of the United States.

Presidential Candidate	Party	Popular Votes	Electoral Votes
Harry S. Truman	Democratic	24 179 345	303
Thomas E. Dewey	Republican	21 991 291	189
J. Strom Thurmond	States' Rights	1 176 125	39
Henry A. Wallace	Progressive	1 157 326	—

1. Who received the most popular votes? _____

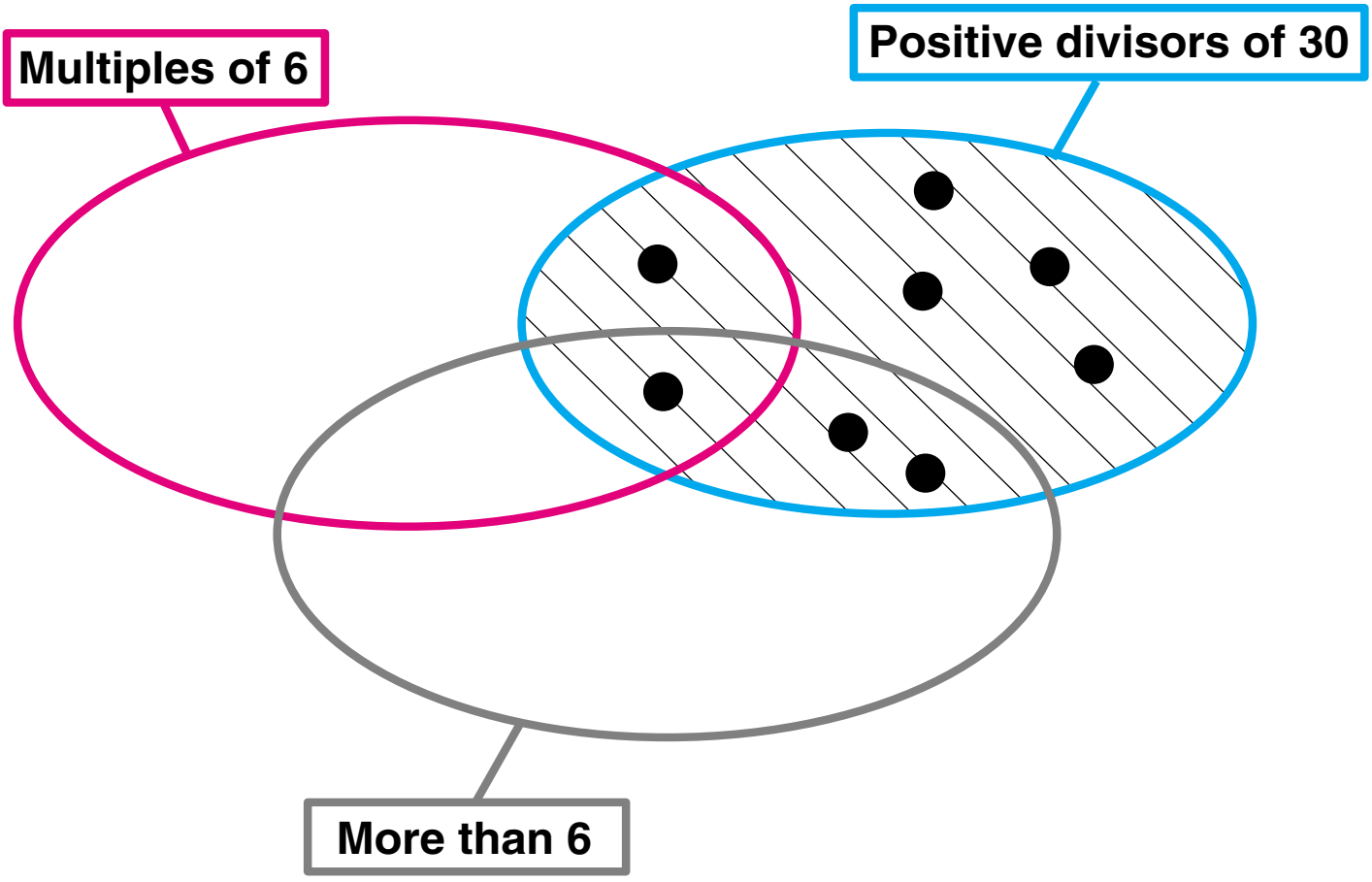
2. Who received the most electoral votes? _____

3. Did Truman receive more than half of the popular vote? ____

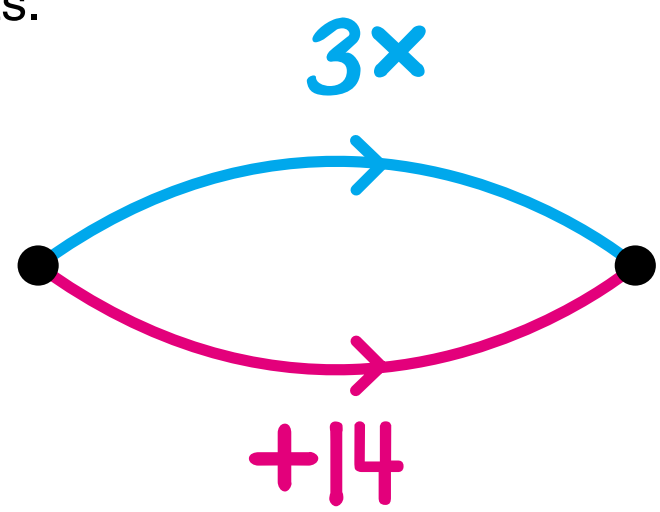
   Did he receive more than half of the electoral votes? _____

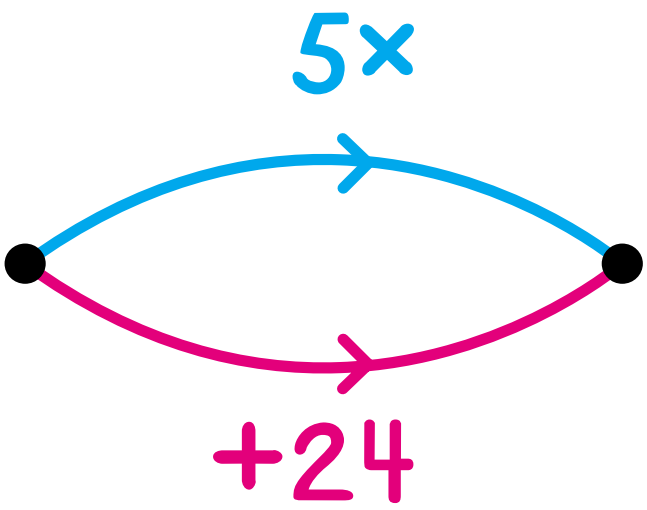
   Explain your answers below.

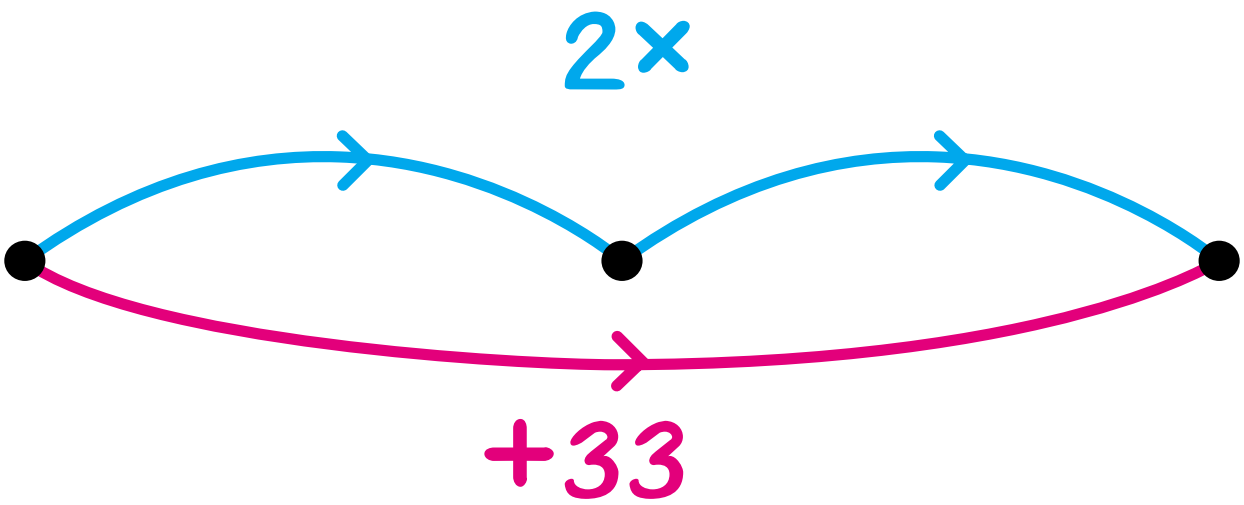
30 has exactly eight positive divisors. Label their dots in this string picture.



Label the dots.







Calvin and Pat work at the Snip and Curl beauty shop. Calvin cuts hair and Pat gives permanents. Last week they had 108 customers. Calvin bragged to Pat, “I gave haircuts to three times as many people as you gave permanents.”
How many customers got haircuts from Calvin? _____
How many customers got permanents from Pat? _____

Explain your solution.

Try to find another solution to this problem.

Explain your solution.