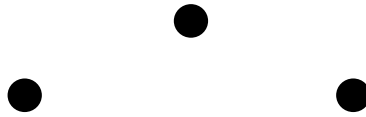


Name _____

Collection of Problems #1

Put any numbers you wish on the Minicomputer with exactly three regular checkers.



 = _____

 = _____

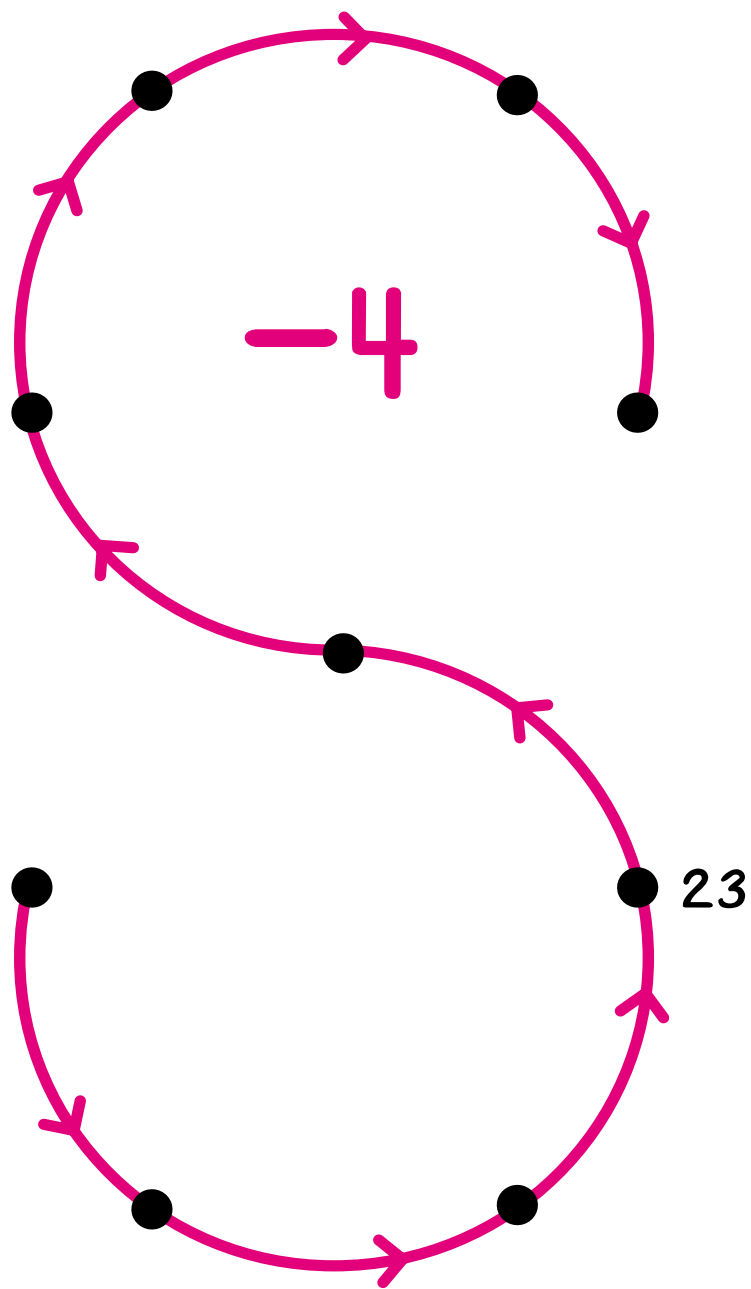
 = _____

 = _____

 = _____

 = _____

Label the dots.



Complete.

$$\begin{array}{r} 23 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 31 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 41 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 21 \\ - 4 \\ \hline \end{array}$$

$$\begin{array}{r} 32 \\ - 4 \\ \hline \end{array}$$

Put each of these numbers in the string picture.

8

9

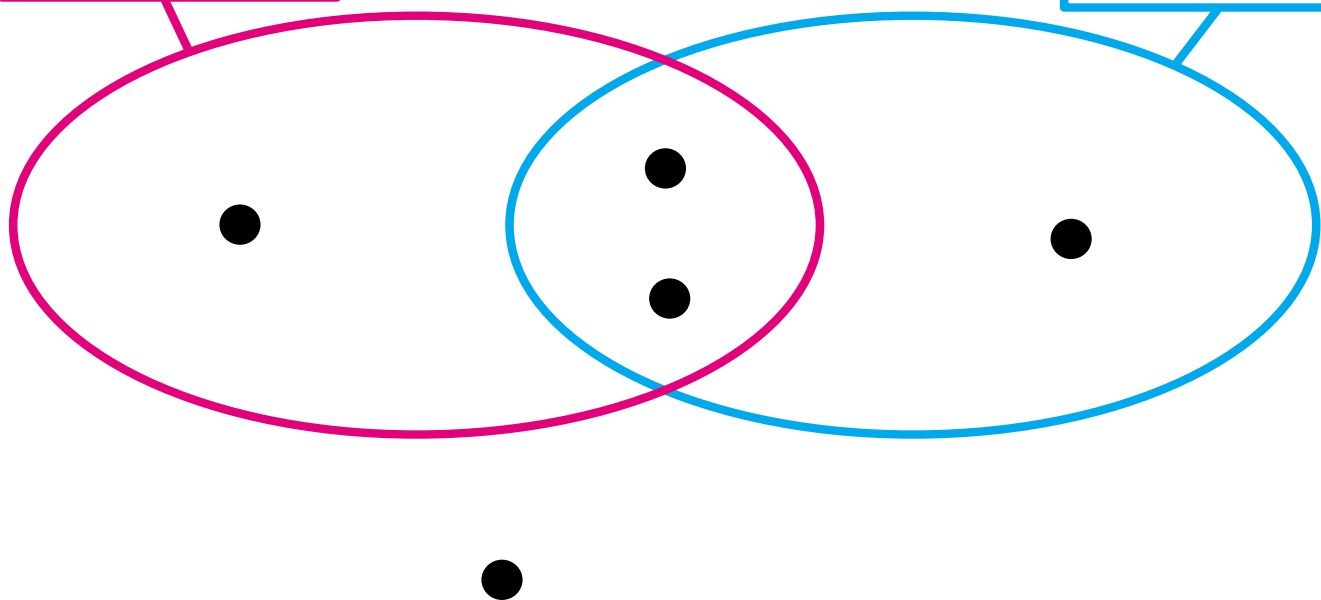
23

14

14

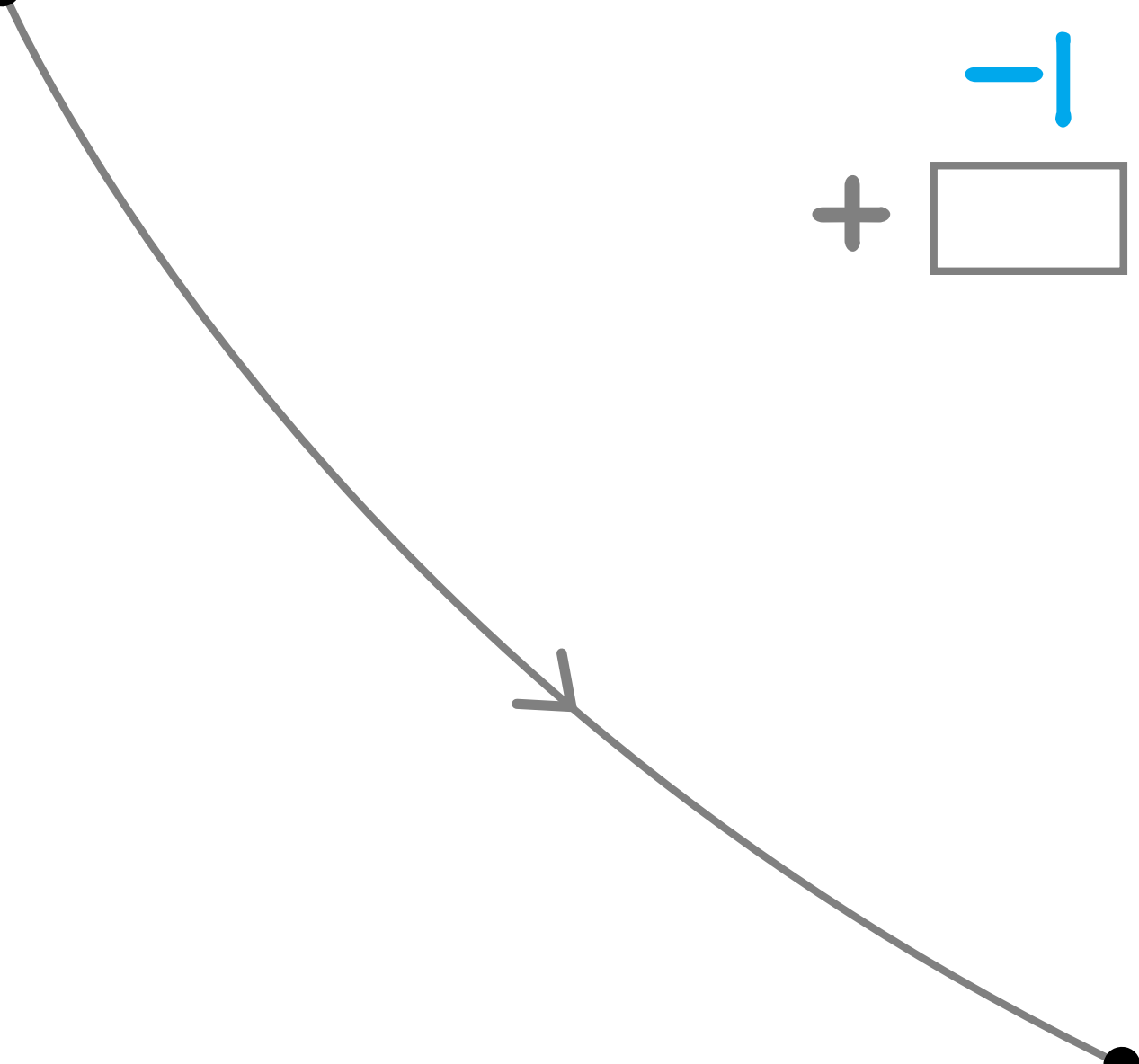
Even numbers

Less than 10



Build an arrow road from 87 to 125 using +10 and -1 arrows. Use fewer than nine arrows in your road. Fill in the box for the gray arrow.

87



125

+10

-1

+

What number is on the Minicomputer?

	●
	●

	●	●
	●	

 = _____

●	●

●	
●	●

 = _____

	●	●
	●	●

	●	●
●		

 = _____

	●

●	
●	●

 = _____

	●
●	

●	●

	●	
	●	●

 = _____

●	●	●

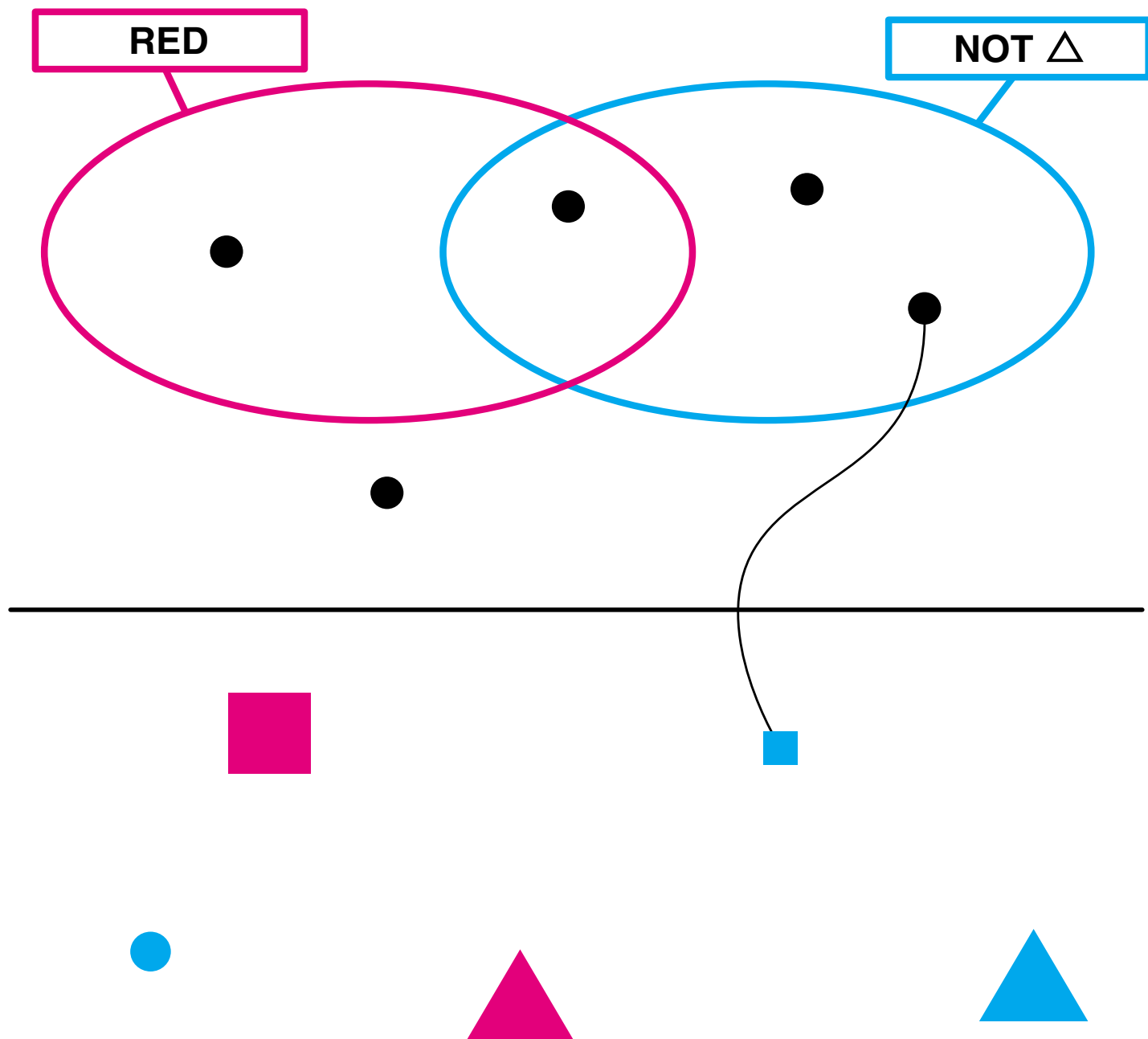
●	
	●

	●

●	●

 = _____

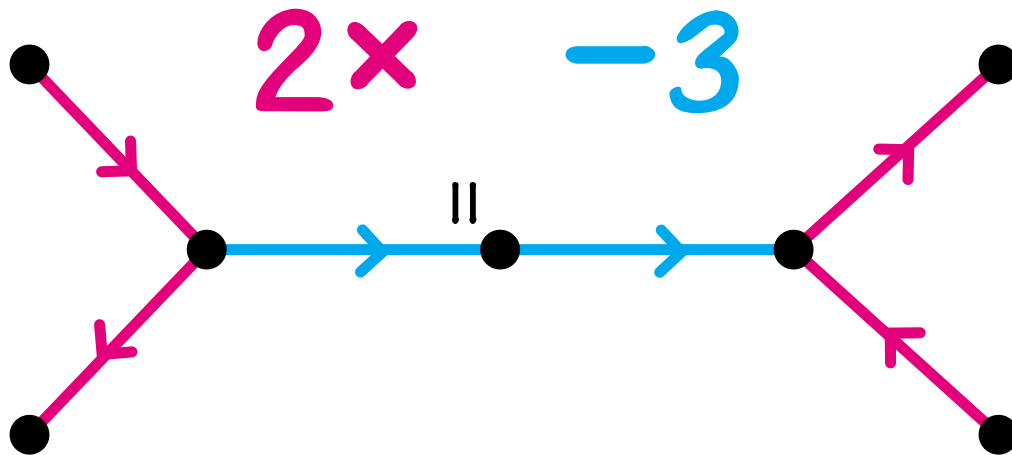
Match each dot with an A-block. One is done for you.



Crick is a secret number.

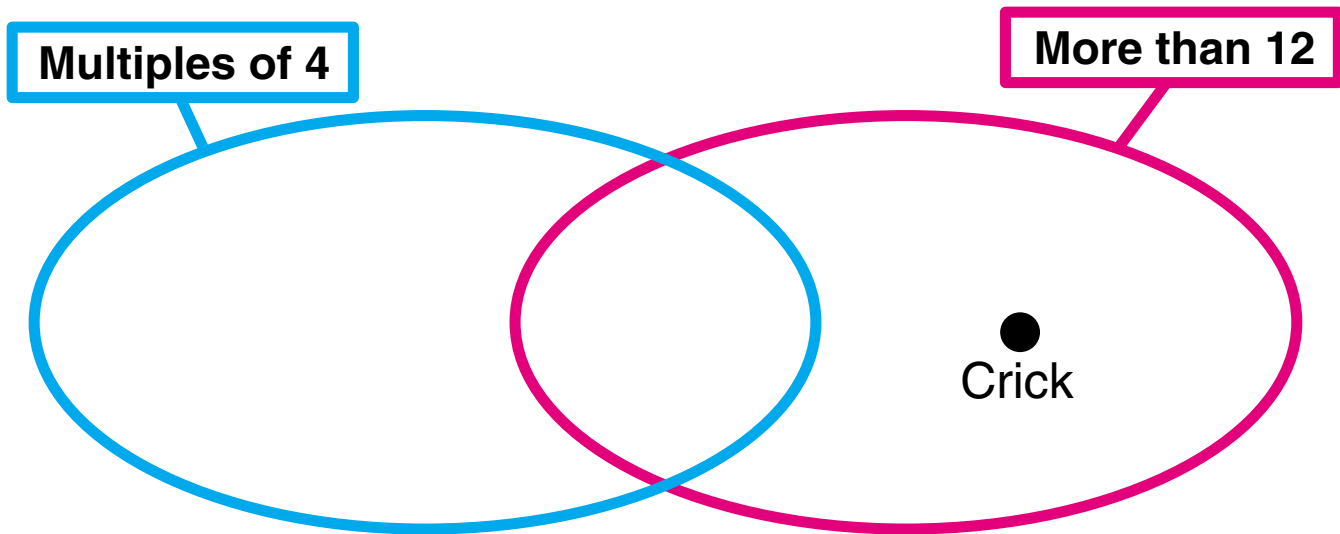
Clue 1

Crick is in this arrow picture.



Clue 2

Crick is in this string picture.



Who is Crick? _____

Complete.

Add.

$$\begin{array}{r} 487 \\ + 235 \\ \hline \end{array}$$

$$\begin{array}{r} 785 \\ + 523 \\ \hline \end{array}$$

$$\begin{array}{r} 1066 \\ + 839 \\ \hline \end{array}$$

Subtract.

$$\begin{array}{r} 58 \\ - 26 \\ \hline \end{array}$$

$$\begin{array}{r} 389 \\ - 65 \\ \hline \end{array}$$

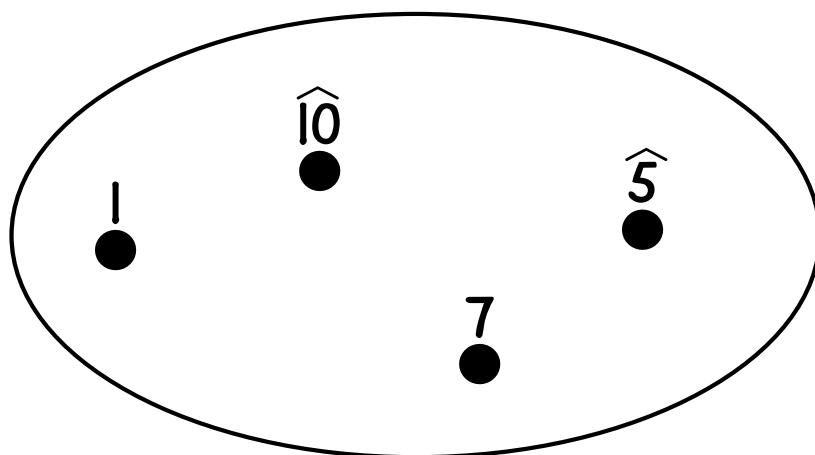
$$\begin{array}{r} 212 \\ - 90 \\ \hline \end{array}$$

$$\begin{array}{r} 257 \\ - 177 \\ \hline \end{array}$$

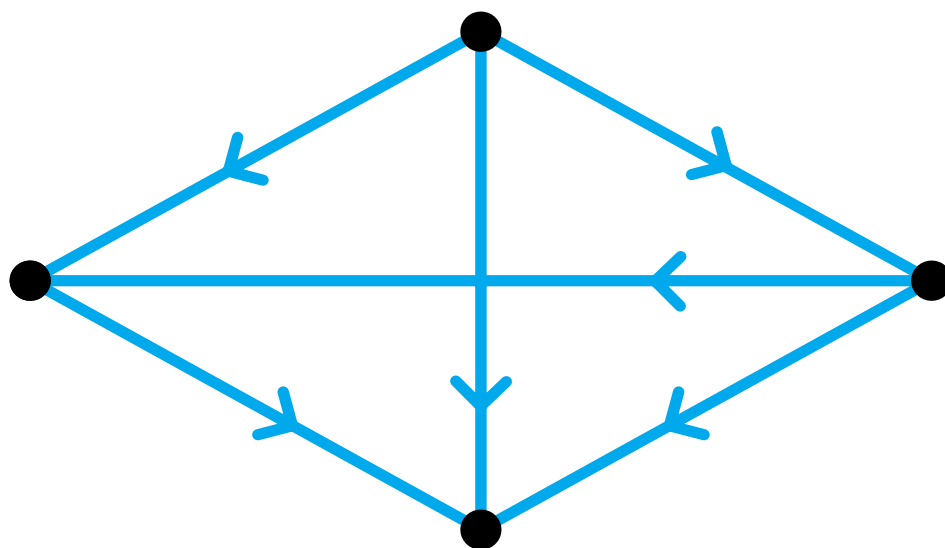
$$\begin{array}{r} 3061 \\ - 754 \\ \hline \end{array}$$

$$\begin{array}{r} 5601 \\ - 1483 \\ \hline \end{array}$$

Put these numbers in the arrow picture.

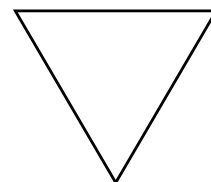


is less than



10

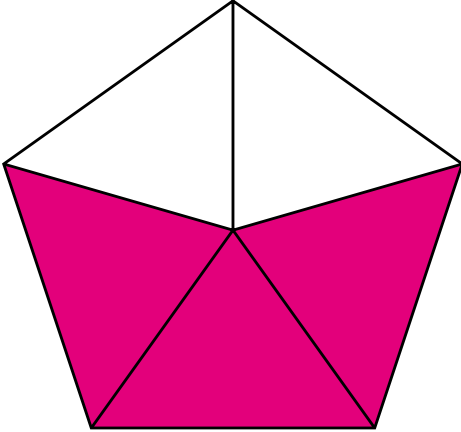
Record in the boxes the number of triangles this size that would fit in each of these shapes. The triangles should not overlap.

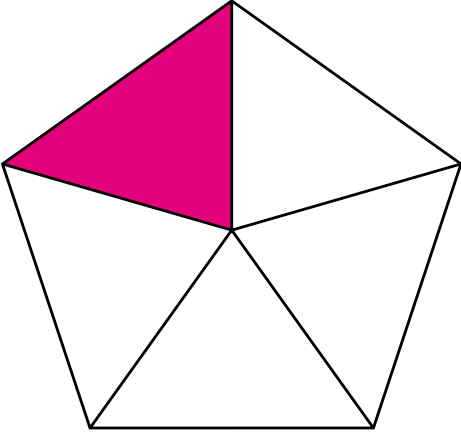


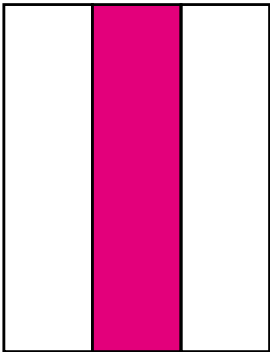
The grid consists of 10 columns and 6 rows of triangles. The shapes and their corresponding boxes are:

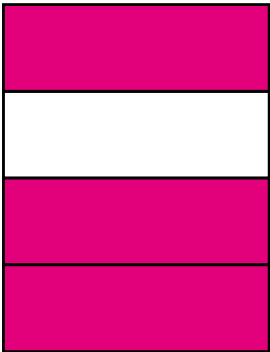
- Pink V-shape:** A V-shape pointing downwards, composed of 4 triangles. Box: triangles
- Blue jagged shape:** A jagged shape pointing downwards, composed of 10 triangles. Box: triangles
- Purple triangle:** A large triangle pointing upwards, composed of 9 triangles. Box: triangles
- Grey hexagon:** A regular hexagon, composed of 6 triangles. Box: triangles

What fractional part of each shape is colored red?











Carrie has 48¢. Which coins could she have?

\$0.48

_____ quarters
_____ dimes
_____ nickels
_____ pennies

Derrick has \$1.12 in coins. He has exactly one quarter.
Which other coins could he have?

\$1.12

 1 quarters
_____ dimes
_____ nickels
_____ pennies

Shane has \$2.05 in coins. He has no pennies and exactly
four nickels. Which other coins could he have?

\$2.05

_____ quarters
_____ dimes
 4 nickels
 0 pennies

Build an arrow road from 17 to 203 using $10\times$ and $+1$ arrows.
Use fewer than ten arrows in your road.

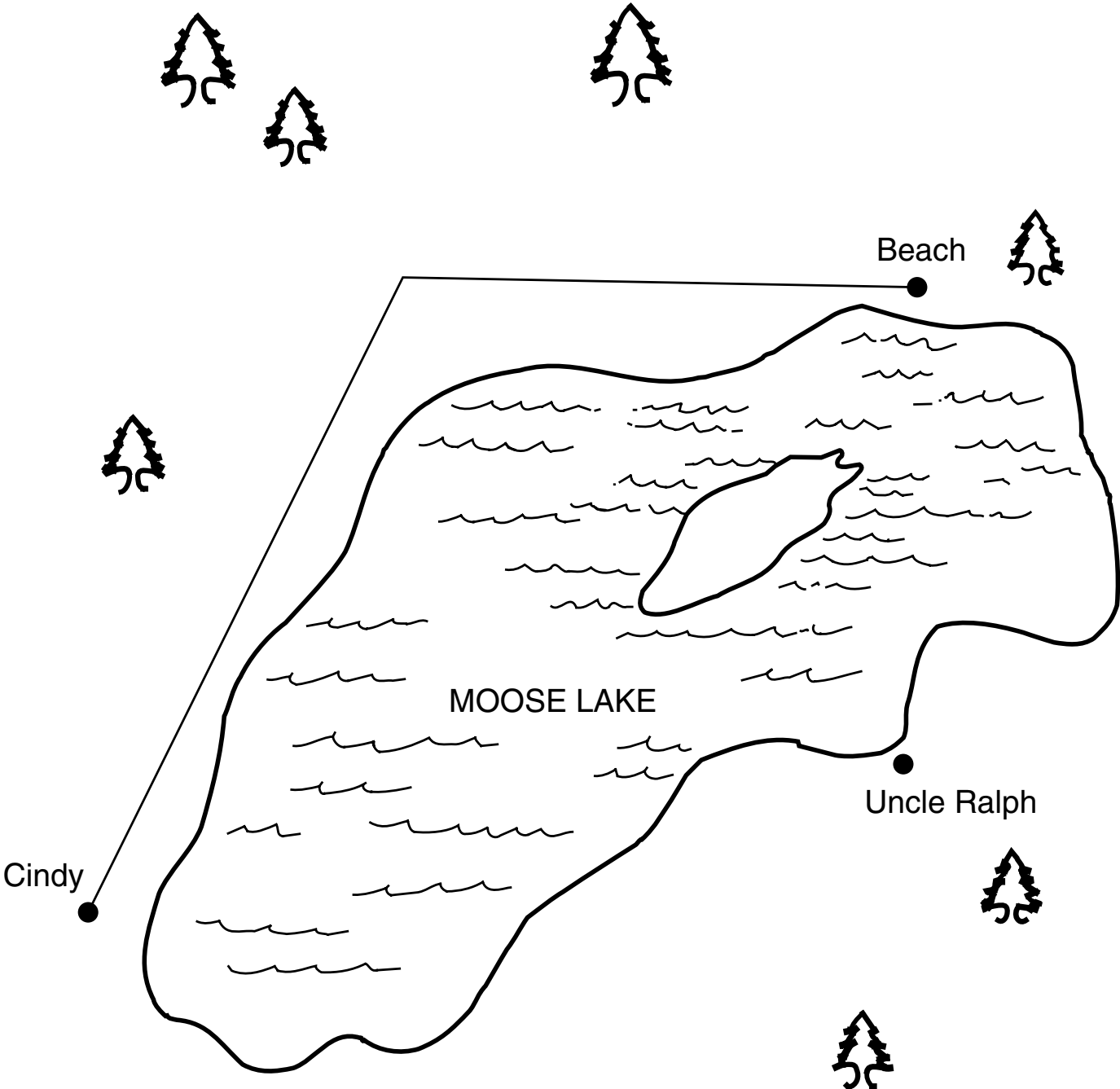
17
●

$10\times$
 $+1$

●
203

Measure the length of the zigzag from Cindy's house to the beach. _____ cm

Draw a zigzag from Cindy's house to Uncle Ralph's cabin without going through the lake. Measure its length. _____ cm



Ramone has a punch recipe. He remembers that to serve six people, he uses 2 cups orange juice. To serve 12 people, he uses 2 liters ginger ale. And to serve 24 people, he uses 2 quarts ice cream.

Complete the recipe for serving 6, 12, or 24 people.

Punch	Punch	Punch
2 cups Orange Juice	_____ Orange Juice	_____ Orange Juice
_____ Ginger Ale	2 liters Ginger Ale	_____ Ginger Ale
_____ Ice Cream	_____ Ice Cream	2 quarts Ice Cream
Serves 6	Serves 12	Serves 24

Ramone wants to make enough punch to serve 18 people. Write the recipe for Ramone.

Punch
_____ Orange Juice
_____ Ginger Ale
_____ Ice Cream
Serves 18

Sig is a secret number.

Clue 1

Sig is one of these numbers.

$$(3 + 6) \times 4 = \underline{\hspace{2cm}}$$

$$(3 \times 6) + 4 = \underline{\hspace{2cm}}$$

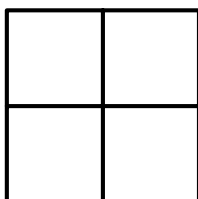
$$3 + (6 \times 4) = \underline{\hspace{2cm}}$$

$$3 \times (6 + 4) = \underline{\hspace{2cm}}$$

Clue 2

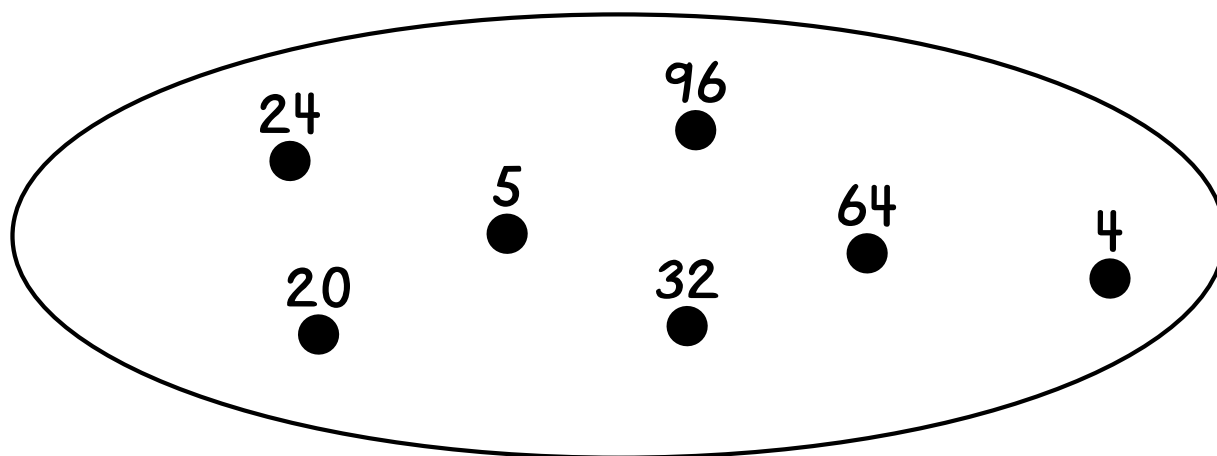
Sig can be put on this Minicomputer with exactly one negative and one $\text{\textcircled{10}}$ -checker.

$\text{\textcircled{<}}$ $\text{\textcircled{10}}$



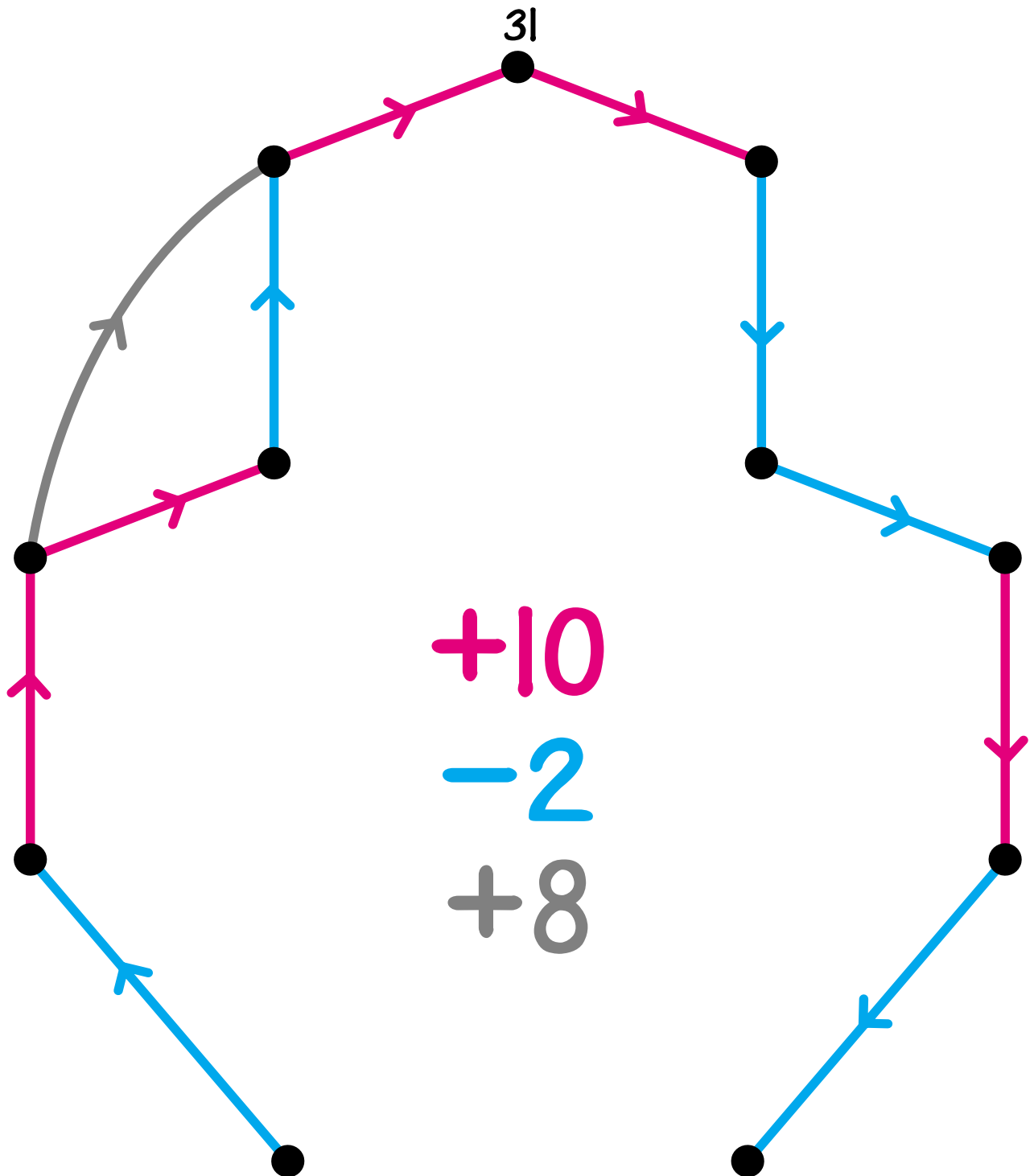
Who is Sig? _____

Put these numbers in the blanks so that the story makes sense.

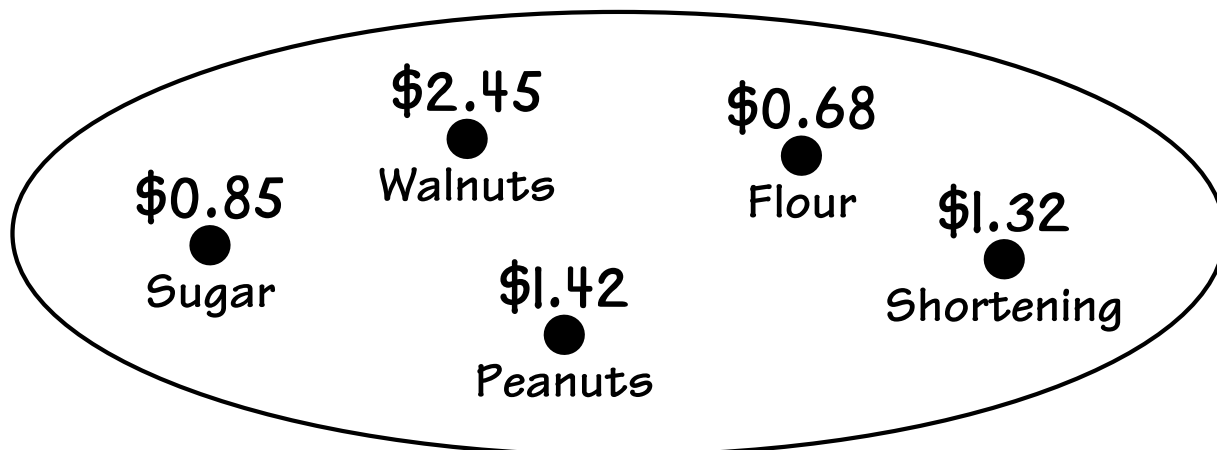


On his trip, Marvin used _____ rolls of film with _____ exposures in each roll. Marvin took _____ pictures having used up all the rolls of film. One-third of the pictures, or _____ pictures, were taken at the Grand Canyon. The remaining _____ pictures were taken at other places he visited. When Marvin has the film developed, he needs to plan to spend \$_____ per roll or about \$_____ altogether.

Label the dots. Draw as many +8 arrows as possible.
One is done for you.



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



Keith bought two items for exactly \$2.00.

Which two items did he buy? _____ and _____

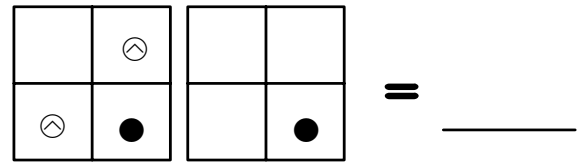
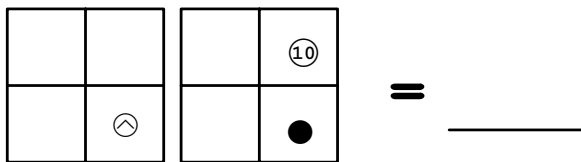
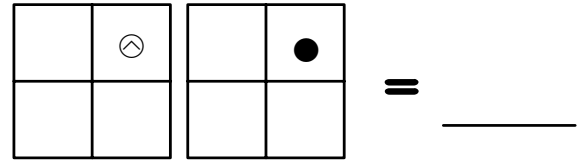
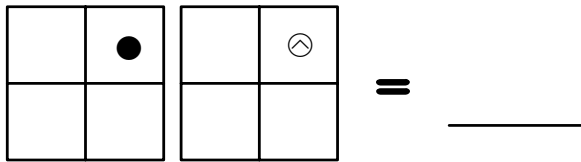
How much more expensive are the walnuts than the peanuts? _____

Ruth bought the peanuts and walnuts. She gave the clerk \$4.00 How much change should she receive? _____

Flora is a secret number.

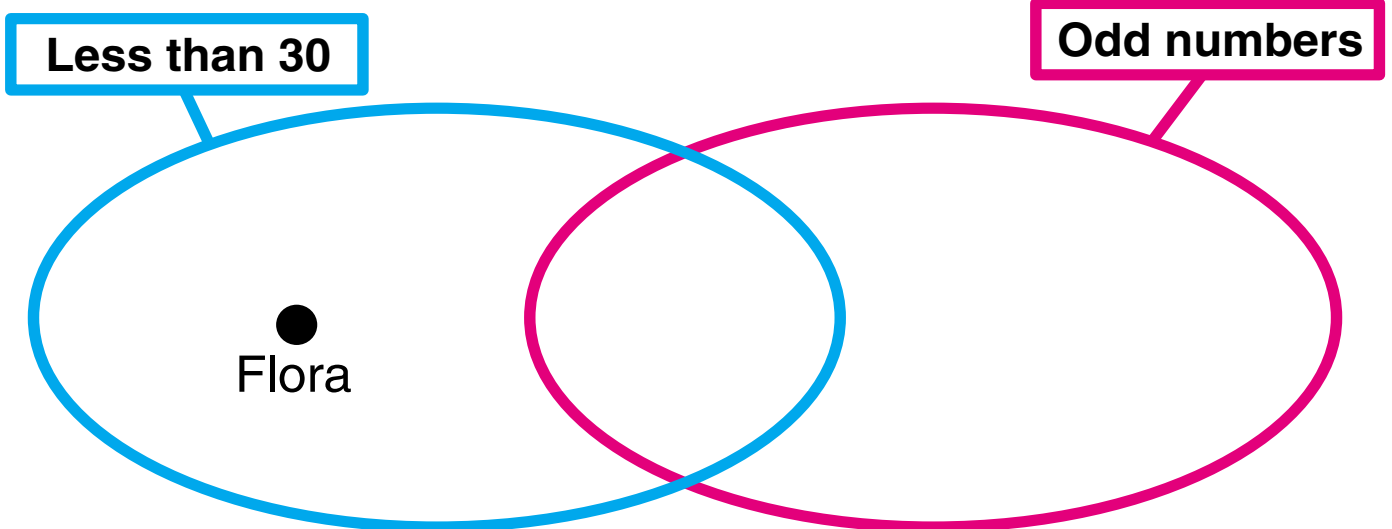
Clue 1

Flora is one of these numbers.



Clue 2

Flora is in this string picture.



Who is Flora? _____

Use the true addition statement in the box to help complete the other addition problems.

$$48 + 26 = 74$$

$47 + 26 = \underline{\hspace{2cm}}$

$48 + 36 = \underline{\hspace{2cm}}$

$48 + 29 = \underline{\hspace{2cm}}$

$38 + 26 = \underline{\hspace{2cm}}$

$148 + 26 = \underline{\hspace{2cm}}$

$48 + 126 = \underline{\hspace{2cm}}$

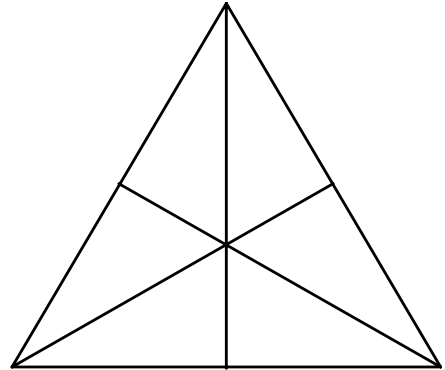
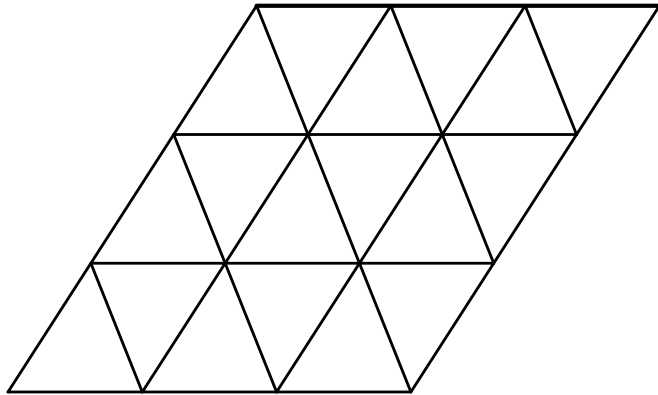
$46 + 25 = \underline{\hspace{2cm}}$

$50 + 24 = \underline{\hspace{2cm}}$

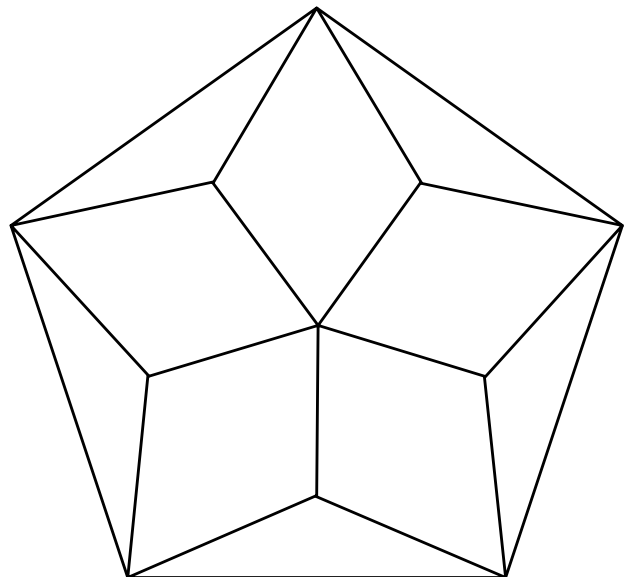
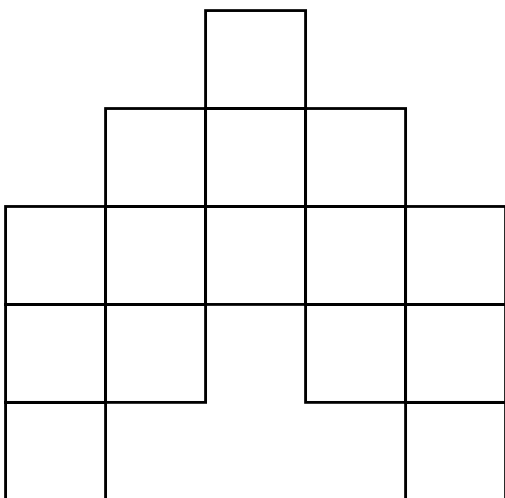
$24 + 13 = \underline{\hspace{2cm}}$

$96 + 52 = \underline{\hspace{2cm}}$

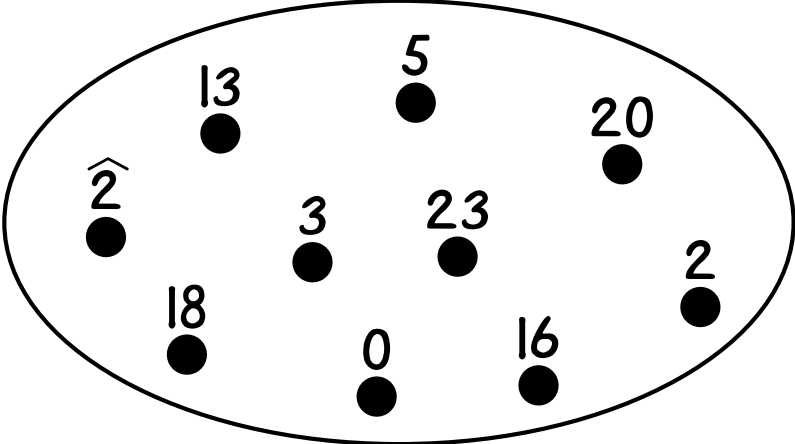
Color one-third of each shape red.



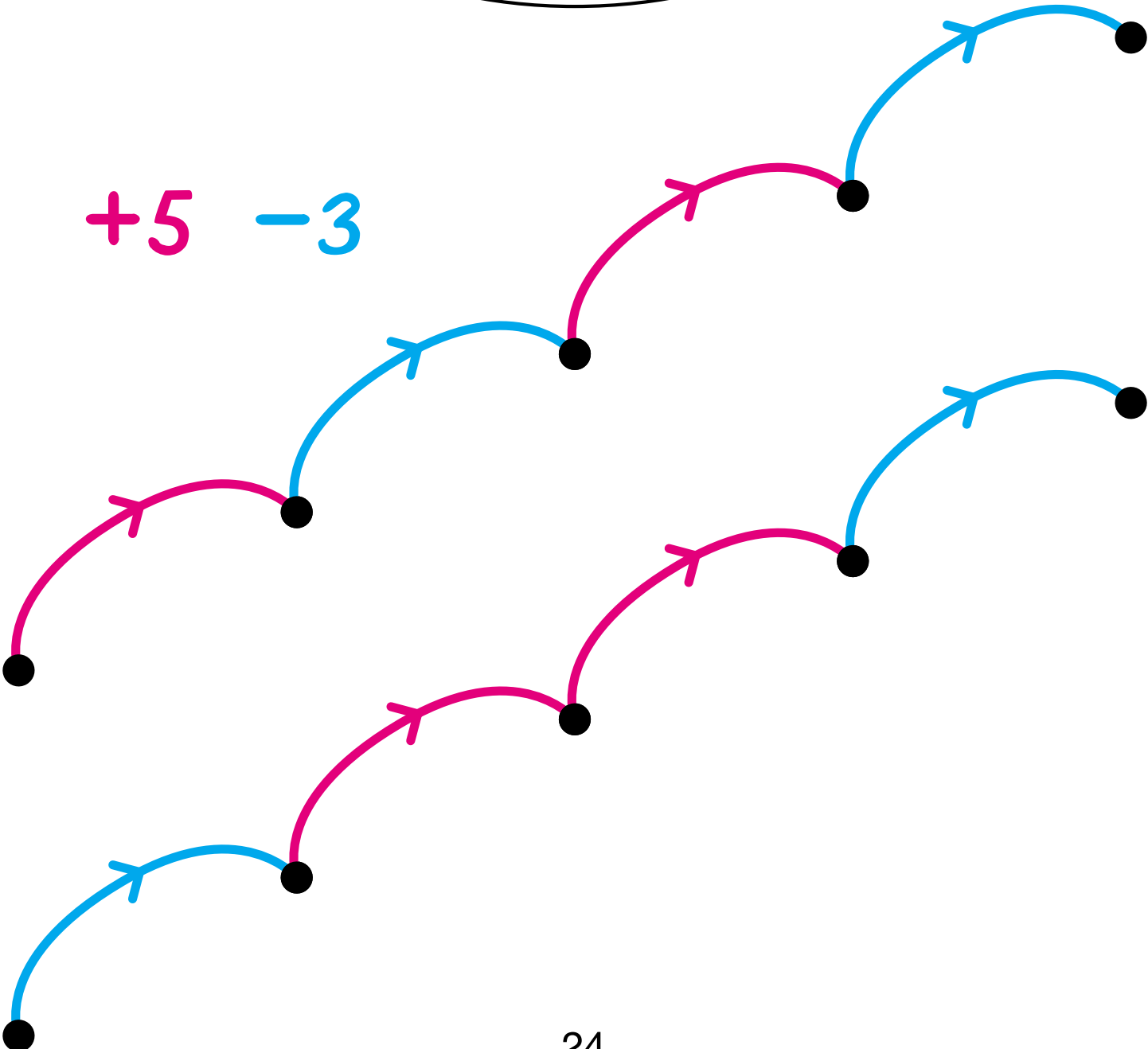
Color one-fifth of each shape blue.



Put these numbers in the arrow picture.



+5 -3



Share 51 cherries among Sandy, Jeff, and Barb.

For Sandy	For Jeff	For Barb

Write a number sentence about this sharing.

Share 85 pennies among Andrea, José, Kim, Randy, and Mark.

For Andrea	For José	For Kim	For Randy	For Mark

Write a number sentence about this sharing.

Put these numbers in the string picture.

7×13

$\widehat{21}$

$\frac{1}{2} \times 36$

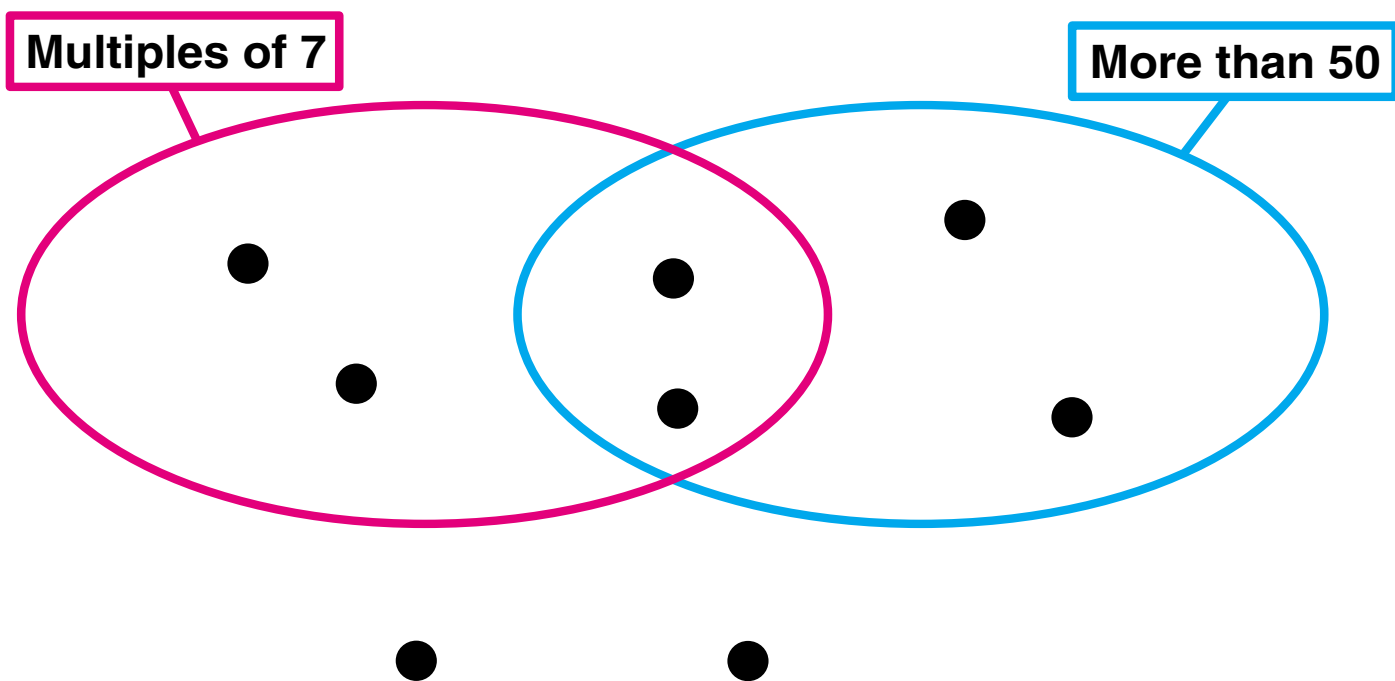
75

$77 + 14$

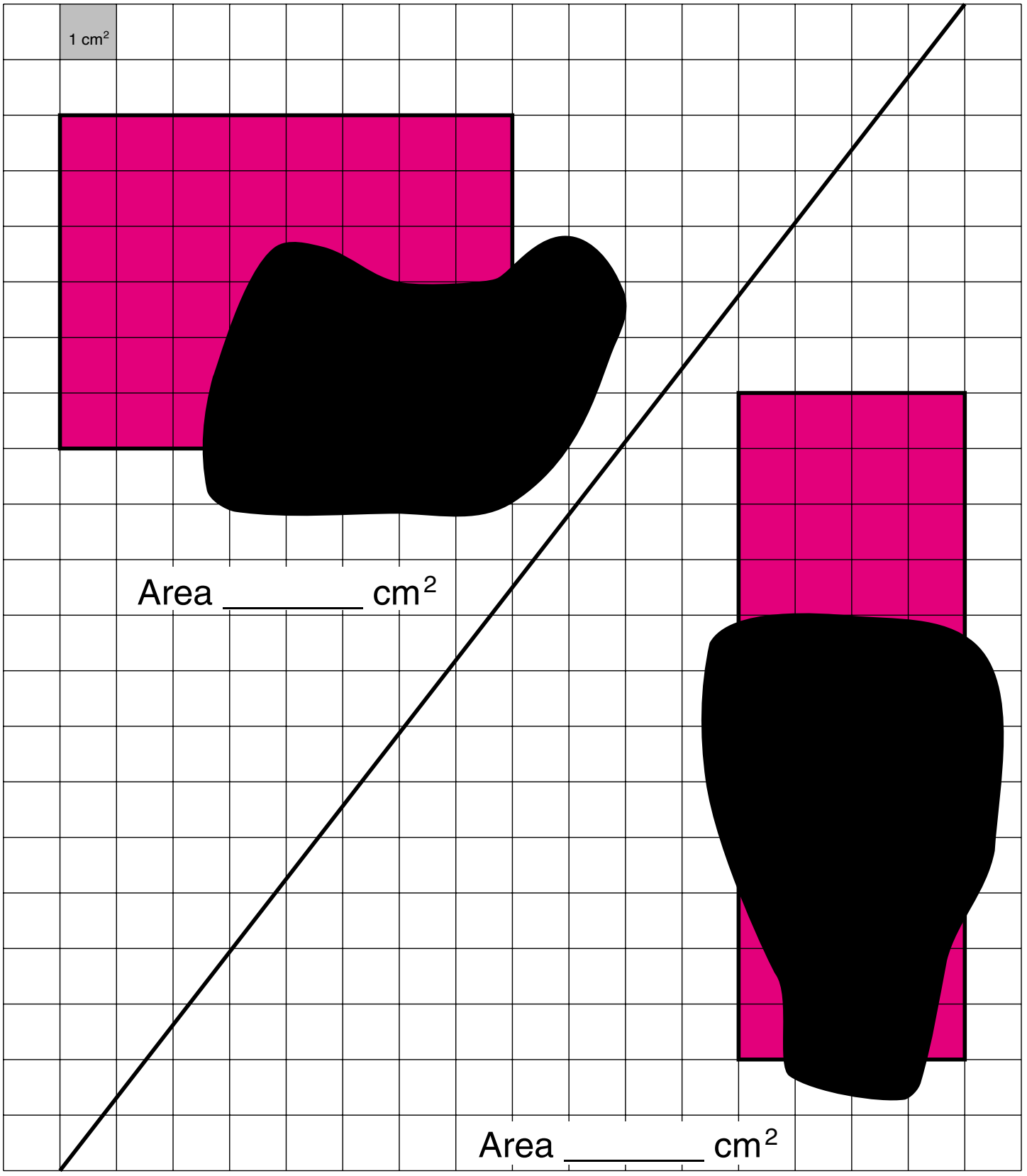
2×14

100

$\widehat{15}$



Each red shape is a rectangle, but part of it is hidden.
 Find the area of each red rectangle.



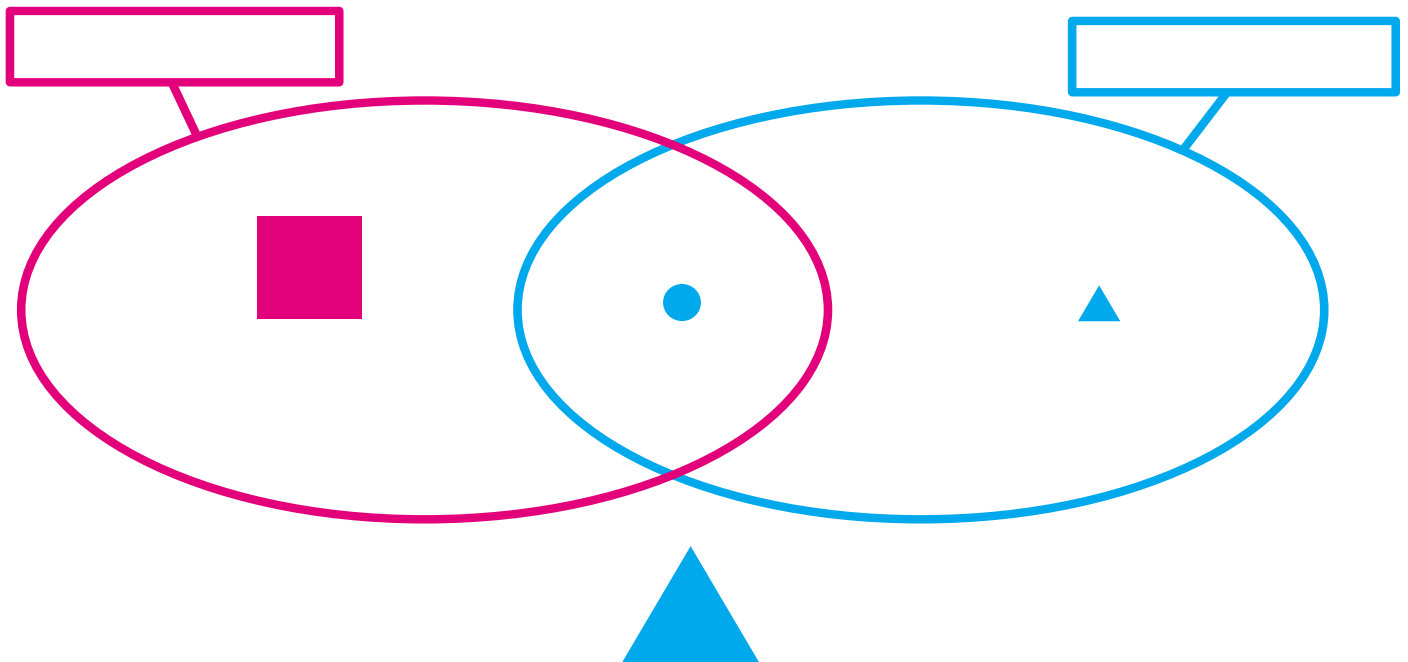
The red label is one of these:

RED	YELLOW	GREEN	BLUE
NOT RED	NOT YELLOW	NOT GREEN	NOT BLUE
○	△	□	BIG
○	△	□	LITTLE

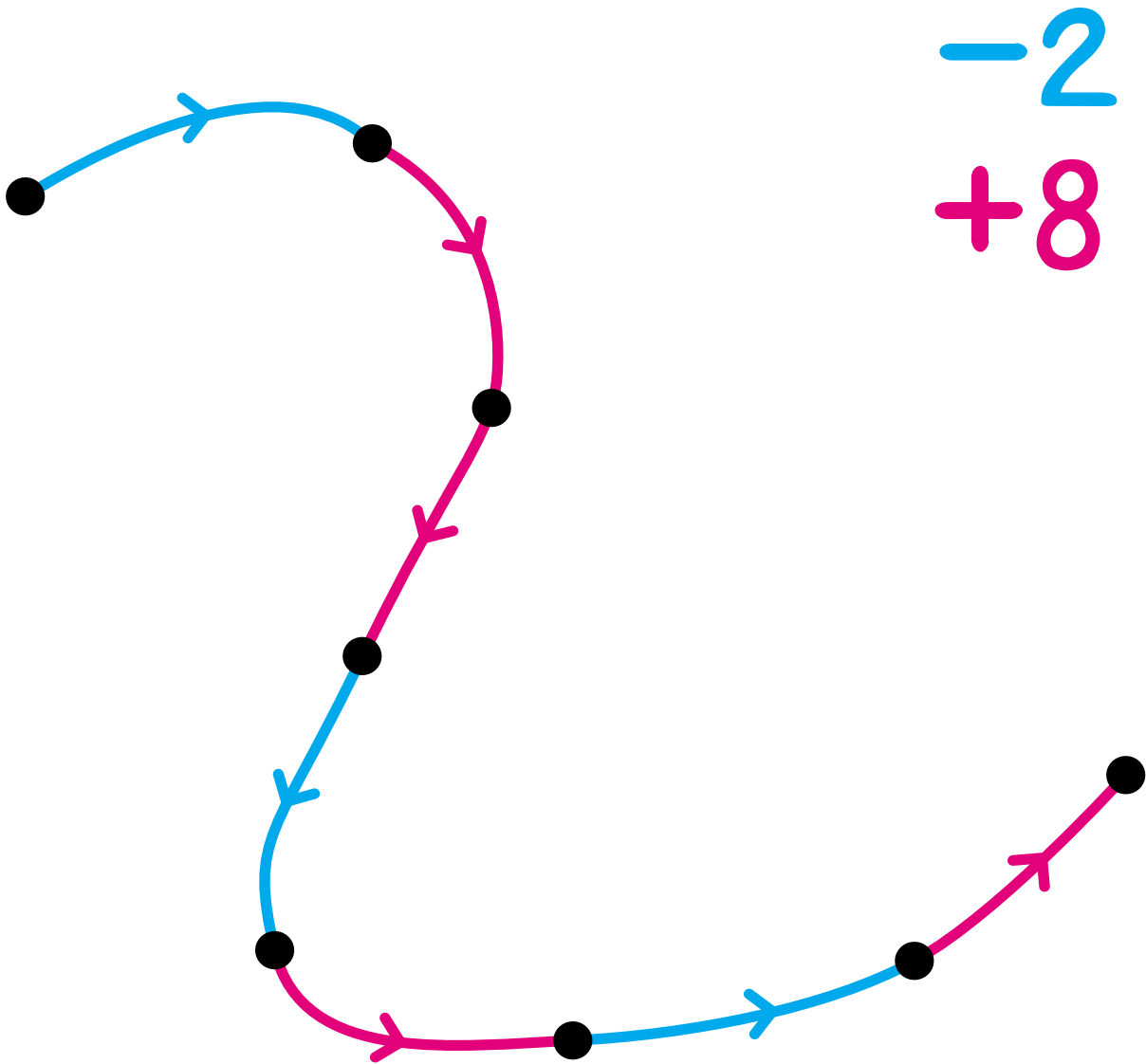
The blue label is one of these:

RED	YELLOW	GREEN	BLUE
NOT RED	NOT YELLOW	NOT GREEN	NOT BLUE
○	△	□	BIG
○	△	□	LITTLE

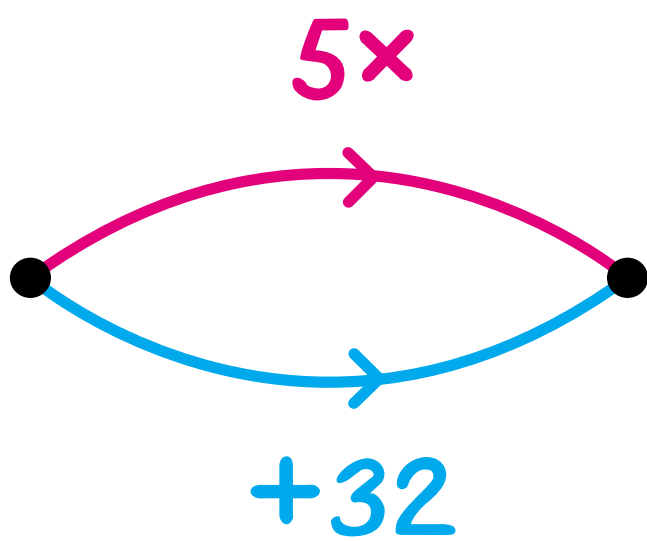
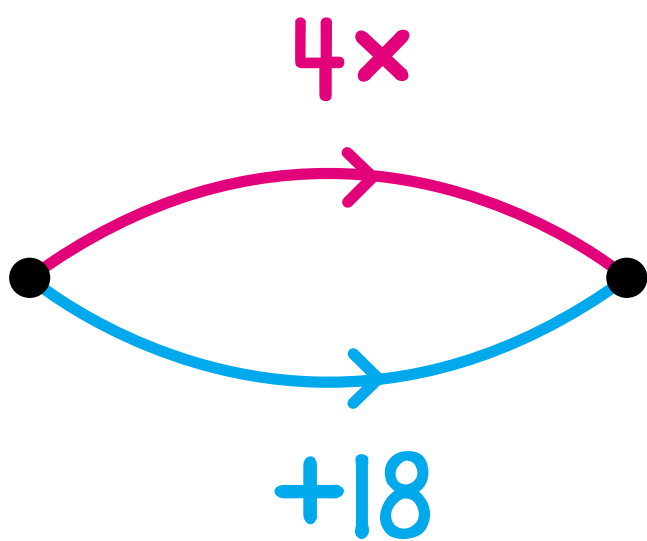
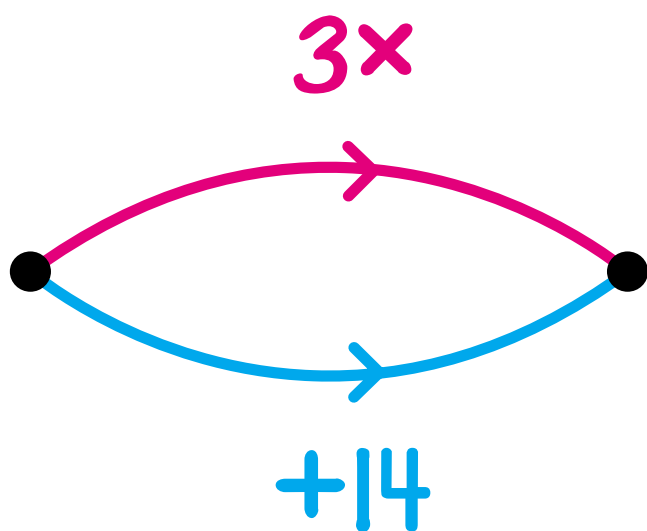
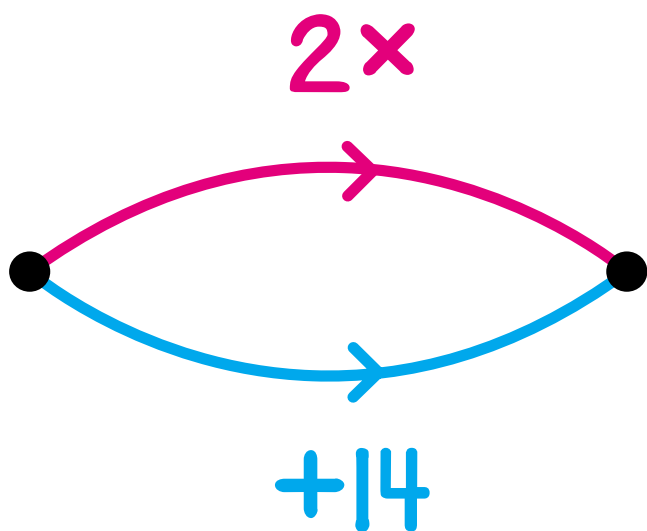
Label the strings.



6 and 10 are in this arrow picture. Locate their dots and label all of the dots.



Label the dots.



Put the four number cards 1 2 3 4 in the spaces of this multiplication problem. Use all the cards, each card once.

$$\begin{array}{r} \square \square \square \\ \times \quad \square \\ \hline \end{array}$$

What is the greatest product you can get? _____

Explain.

$$\begin{array}{r} \square \square \square \\ \times \quad \square \\ \hline \end{array}$$

What is the least product you can get? _____

Explain.

$$\begin{array}{r} \square \square \square \\ \times \quad \square \\ \hline \end{array}$$

Can you get a product between 500 and 600? _____

Explain.

$$\begin{array}{r} \square \square \square \\ \times \quad \square \\ \hline \end{array}$$

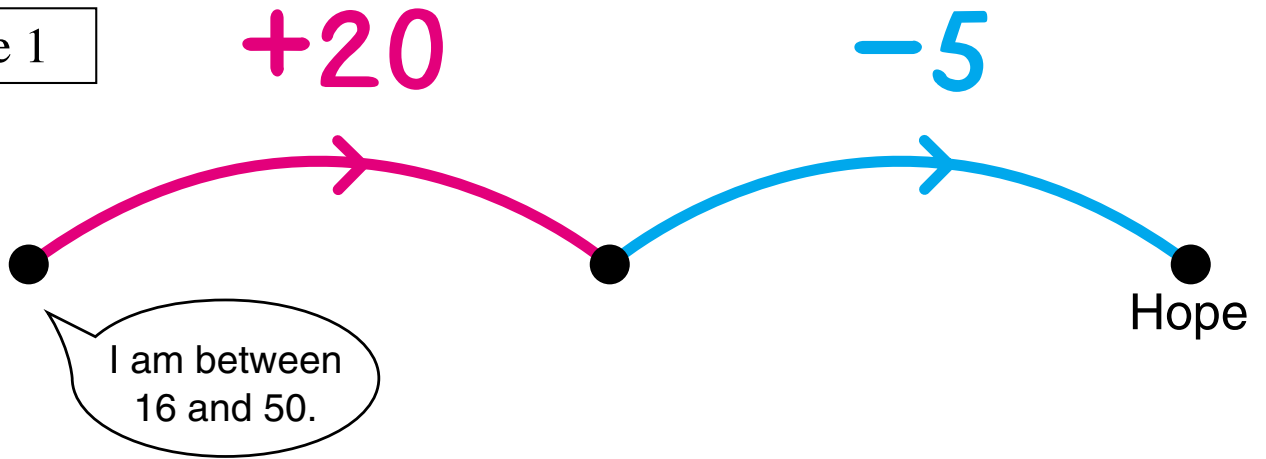
What product is as close as possible to 1 000? _____

Explain.

$$\begin{array}{r} \square \square \square \\ \times \quad \square \\ \hline \end{array}$$

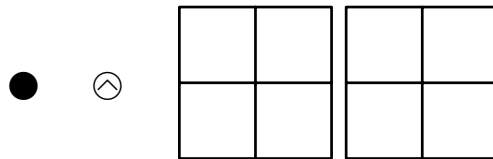
Hope is a secret number.

Clue 1



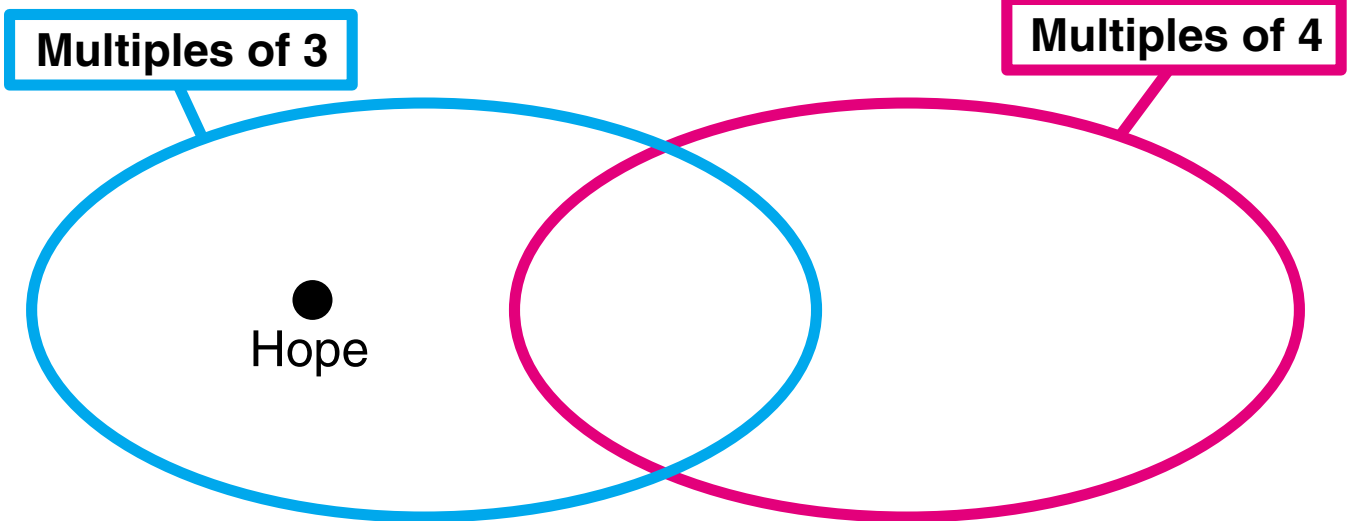
Clue 2

Hope can be put on this Minicomputer with exactly one regular and one negative checker.



Hope could be _____, _____, _____, _____, _____, or _____.

Clue 3



Who is Hope? _____