Name _____

Collection
of
Problems #4

Label the dots.

+7

16

19

0
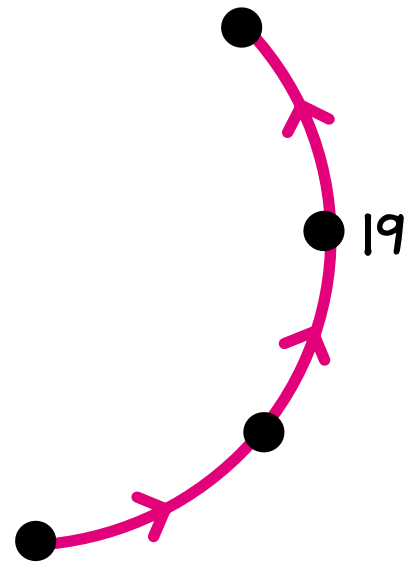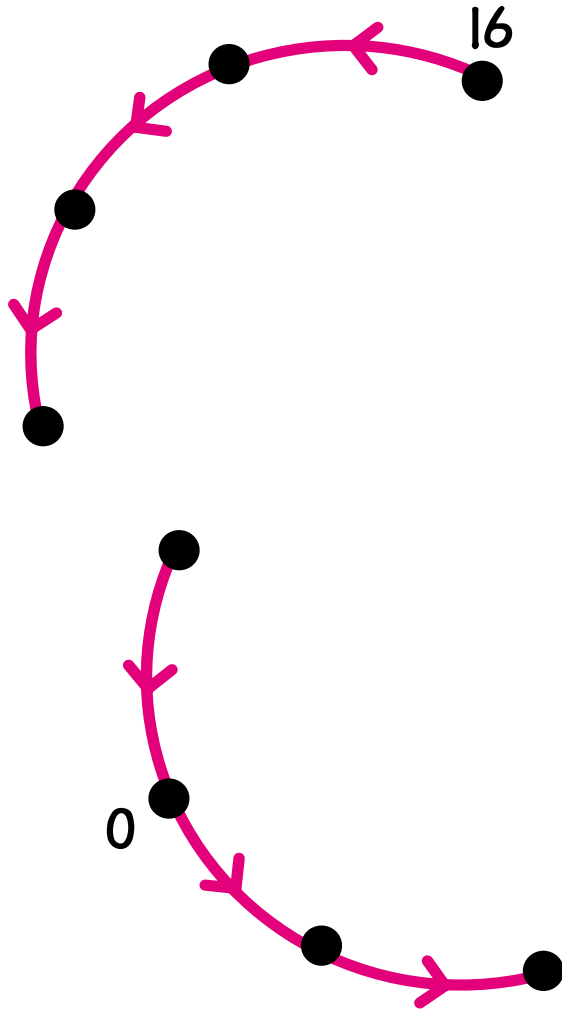
Complete.

16	19	14	12	37	16	26
+ 7	− 7	+ 7	− 7	+ 7	− 7	+ 7

Complete.

$$45 - 24 = \boxed{}$$

$$145 - 24 = \boxed{}$$

$$345 - 24 = \boxed{}$$

$$345 - 124 = \boxed{}$$

$$50 - 24 = \boxed{}$$

$$51 - 24 = \boxed{}$$

$$52 - 24 = \boxed{}$$

$$53 - \boxed{} = 29$$

3

What number is on the Minicomputer?

= _____

= _____

= _____

= _____

= _____

= _____

Build an arrow road from 78 to 109 using +10 and −3 arrows.

+10
−3

109
●

●
78

Fill in the boxes.

```
    6              60            600
    6              60            600
    6              60            600
    6              60            600
    6              60            600
  + 6            + 60          +600
  ┌─────┐        ┌─────┐       ┌─────┐
  └─────┘        └─────┘       └─────┘
```

6 × 6 = ☐   6 × 60 = ☐   6 × 600 = ☐

```
    9              90            900
    9              90            900
  + 9            + 90          +900
  ┌─────┐        ┌─────┐       ┌─────┐
  └─────┘        └─────┘       └─────┘
```

3 × 9 = ☐   3 × 90 = ☐   3 × 900 = ☐

3 × 92 = ☐   3 × 909 = ☐

Put these numbers in the string picture.

$\widehat{7}$ 30 $\widehat{10}$ $\widehat{15}$ 0

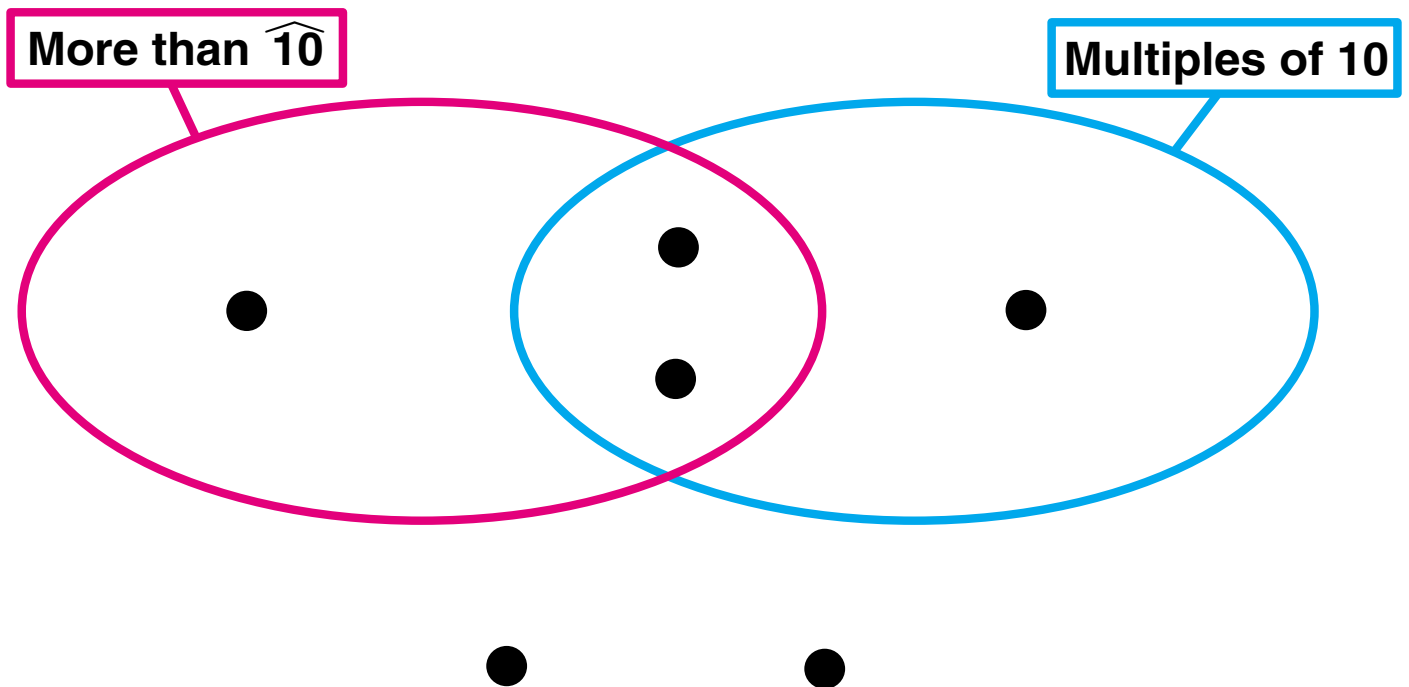**More than $\widehat{10}$**   **Multiples of 10**

One of the dots does not have a label. Label it with a number of your choice.

Put any number you wish on the Minicomputer using exactly one ⑩-checker.

= _____

= _____

_____

Put any number you wish on the Minicomputer using exactly two ⑩-checkers.

= _____

= _____

_____

Put any number you wish on the Minicomputer using exactly three ⑩-checkers.

= _____

_____

Fill in the box for each arrow.

+ ☐　41 ↗ 26	38 ↘ **−** ☐　13
12 ↙ **÷** ☐　36	25 ↙ **×** ☐　250
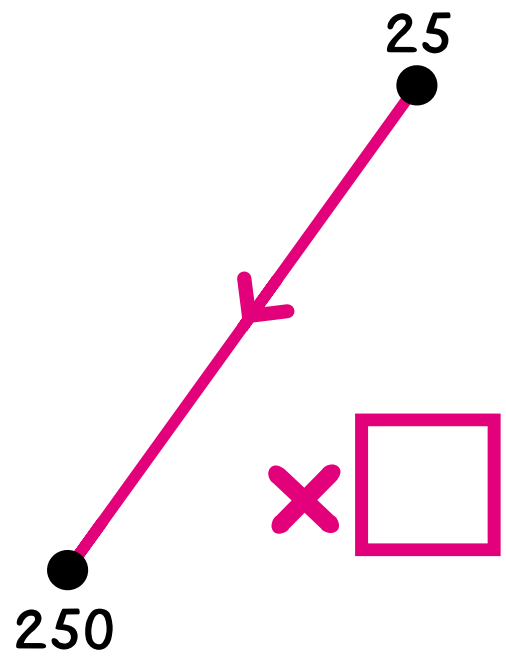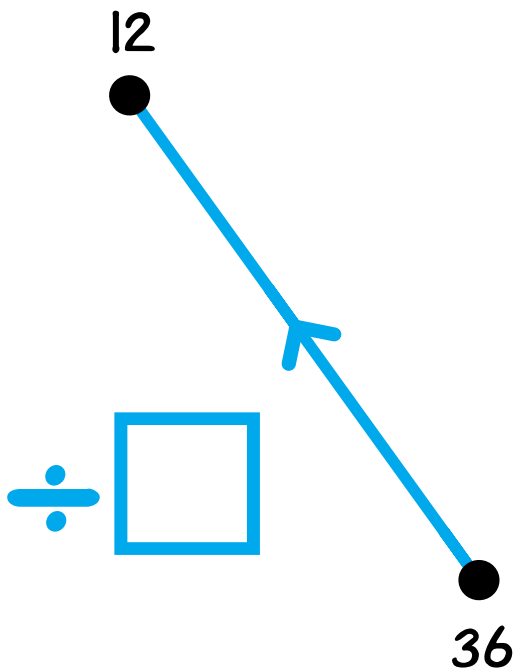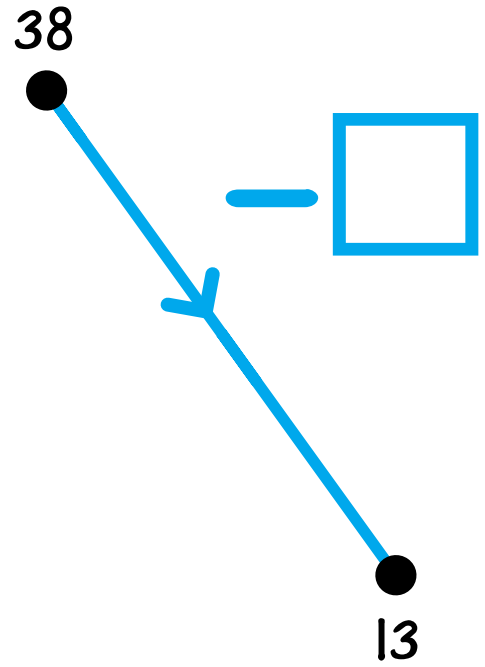
Complete the calculations.

$$
\begin{array}{r}
259 \\
142 \\
+\,345 \\
\hline
\end{array}
$$

$$482 + 219 = \underline{\hphantom{0000}}$$

$$
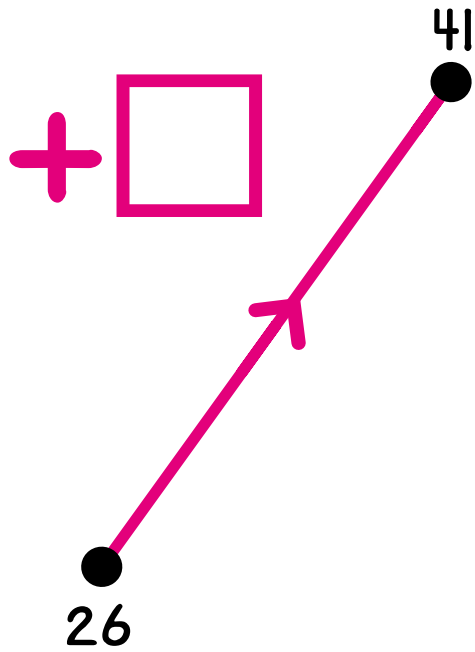\begin{array}{r}
137 \\
-\,55 \\
\hline
\end{array}
$$

$$
\begin{array}{r}
906 \\
-\,329 \\
\hline
\end{array}
$$

$$73 - 37 = \underline{\hphantom{0000}}$$

$$
\begin{array}{r}
125 \\
\times\;\;4 \\
\hline
\end{array}
$$

$$
\begin{array}{r}
63 \\
\times\;\;8 \\
\hline
\end{array}
$$

$$12 \div 4 = \underline{\hphantom{0000}}$$

Tong is a secret number.

Clue 1

Tong is one of these numbers.

 = _____

 = _____
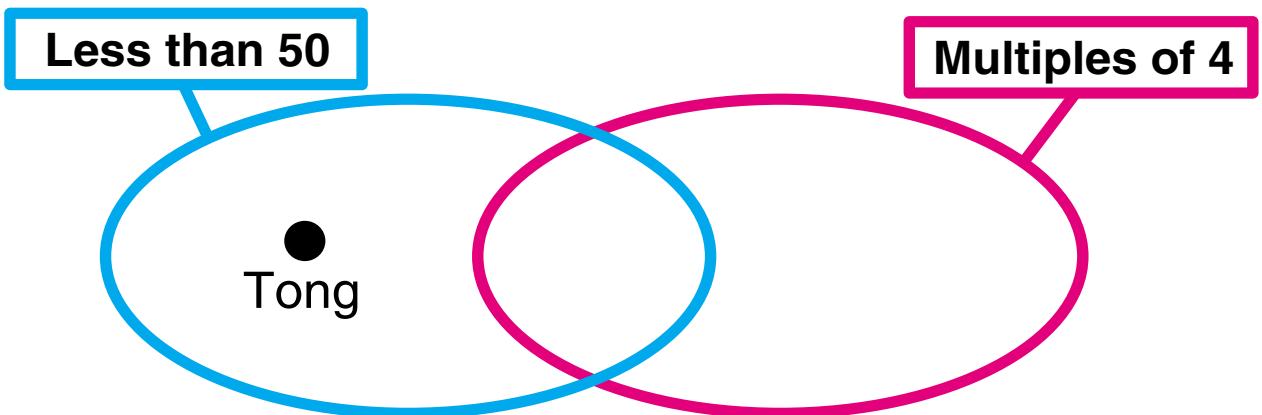
 = _____

 = _____
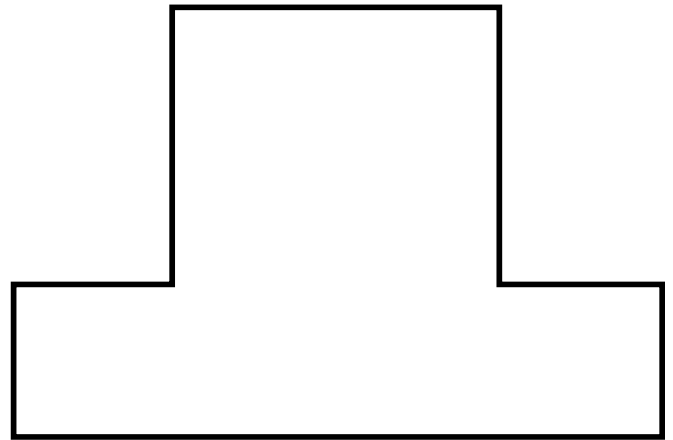
Clue 2

Less than 50

Multiples of 4

● Tong

Who is Tong? _____

11

Color one-fourth of each shape blue.
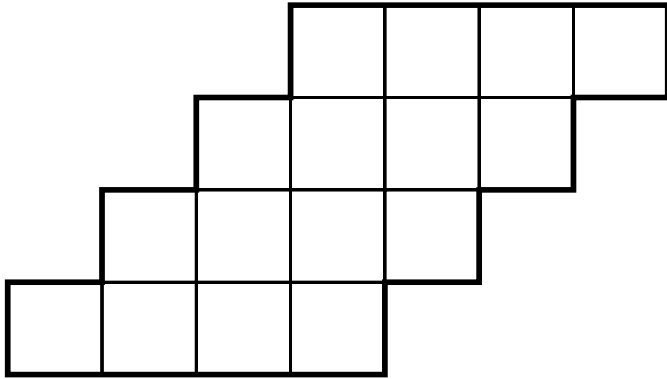
What fractional part of each shape is colored red?

_____   _____
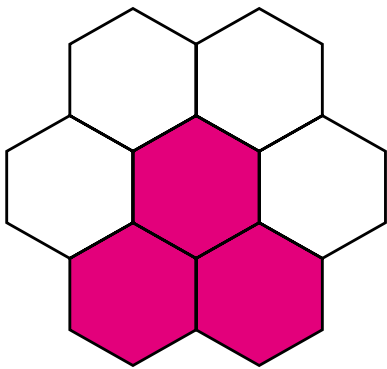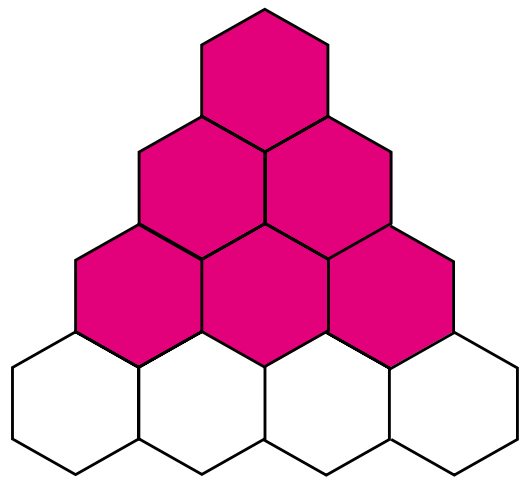
This graph shows the number of students in each grade level at the Sunset Hills Elementary School.

Sunset Hills Elementary School Enrollment
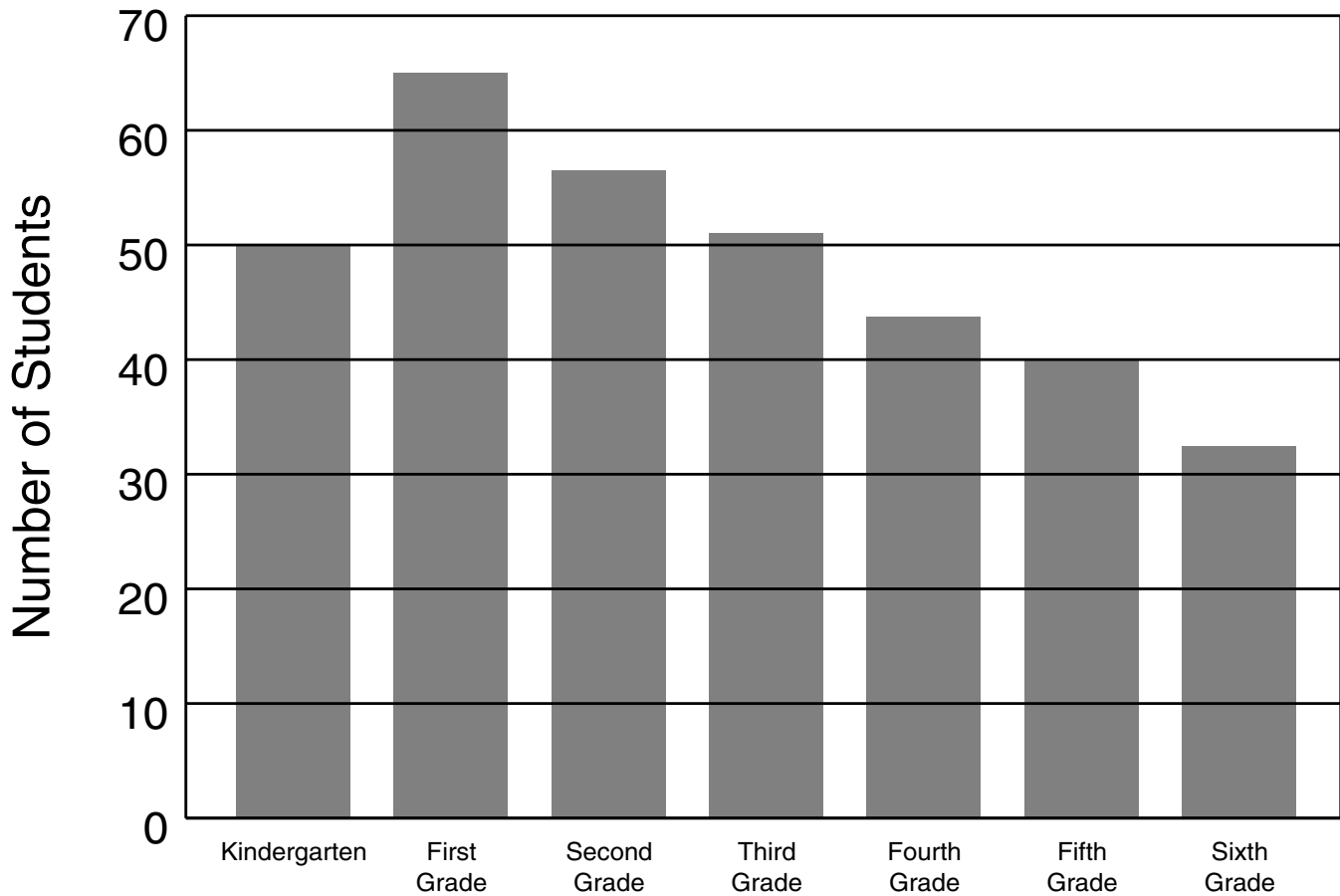
1. How many students are there in each grade level?

_____ _____ _____ _____ _____ _____ _____
Kindergarten   First   Second   Third   Fourth   Fifth   Sixth

2. How many students are in the Intermediate Grades (Fourth, Fifth, and Sixth)? _____

3. How many students are in the Primary Grades (Kindergarten, First, Second, and Third)? _____

4. How many students are there altogether at Sunset Hills Elementary School? _____

Put these numbers in the arrow picture.

13

$\widehat{4}$

0

$\widehat{10}$

8

is less than

14
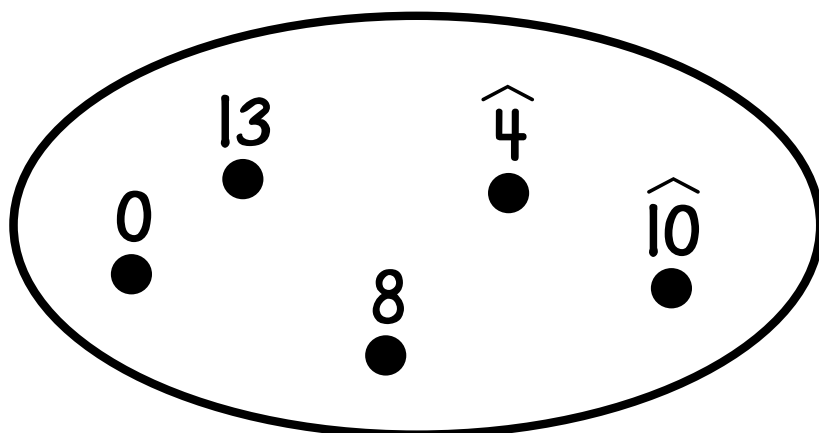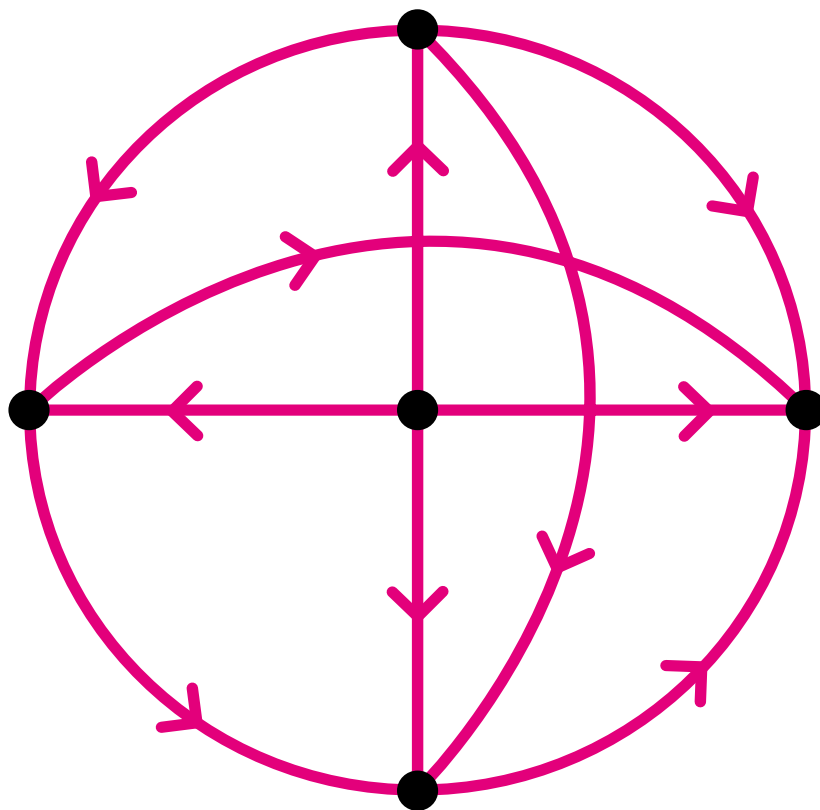
Jason and Carla are making Mardi Gras necklaces for some of their friends.

```
Materials for a Mardi Gras necklace
       6       large beads
      15       small beads
       8       charms
      52 cm  string
       1       fastener
```

1. Jason wants to make necklaces for three friends.
   How much of each item does he need?

   _____ large beads   _____ cm string
   _____ small beads   ___3___ fasteners
   _____ charms

2. Carla wants to make necklaces for five friends.
   How much of each item does she need?

   _____ large beads   _____ cm string
   _____ small beads   ___5___ fasteners
   _____ charms

Each side of a small diamond in this grid is 1 cm long. Find the perimeter of each shape and record it in the box of the same color.

| | cm |

| | cm |

| | cm |
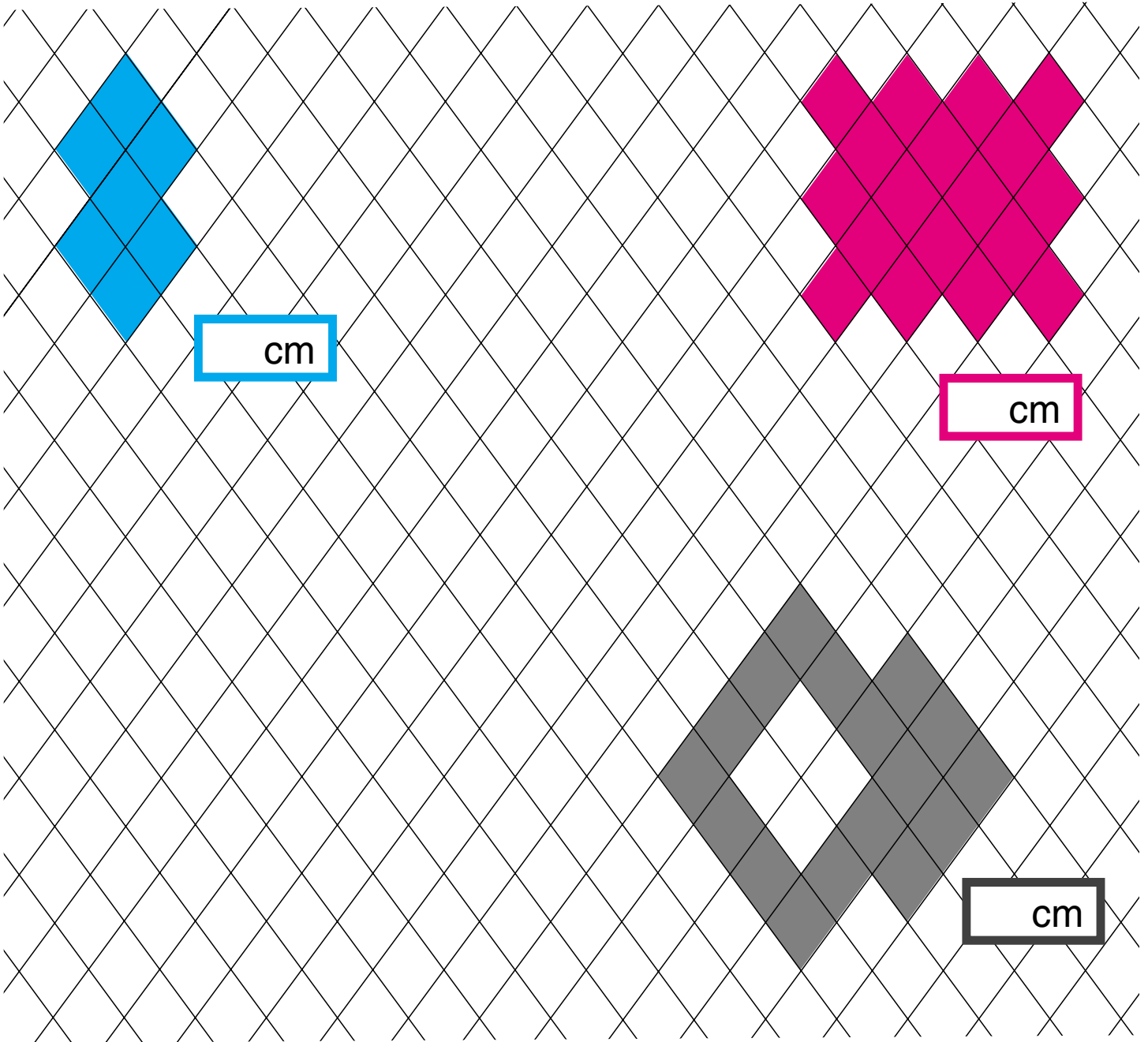
Can you color a shape with perimeter 20 cm? _____ Explain.

Can you color a shape with perimeter 15 cm? _____ Explain.

Complete this table.

25¢	10¢	5¢	1¢	Total Amount
0		3	3	$0.58
	0	1	2	$1.32
1	4			$0.84
	5		2	$2.07
		3	0	$1.20

15 ⌒ ● ⌒ 100

Pair the tags. One is done for you.

+5	×10
÷3	+40
×4	−50
−5	×5
×10	+95

(÷3 is connected to +95)

Fill in the boxes to complete these calculations.

$4 \times 7 = \boxed{}$

$5 \times 7 = 35$

$6 \times 7 = \boxed{}$

$7 \times 7 = \boxed{}$

$10 \times 15 = 150$

$11 \times 15 = \boxed{}$

$12 \times 15 = \boxed{}$

$13 \times 15 = \boxed{}$

$20 \times 7 = \boxed{}$

$20 \times 8 = \boxed{}$

$20 \times 9 = \boxed{}$

$20 \times 10 = 200$

$12 \times 12 = 144$

$12 \times 13 = \boxed{}$

$12 \times 14 = \boxed{}$

$12 \times 15 = \boxed{}$

On each number line, label the middle dot with the number halfway between the two given numbers. Fill in the boxes for the arrows.

$+\boxed{}$

21   49

$+\boxed{}$

$+\boxed{}$

36   70

$+\boxed{}$

$+\boxed{}$

5   13

$+\boxed{}$
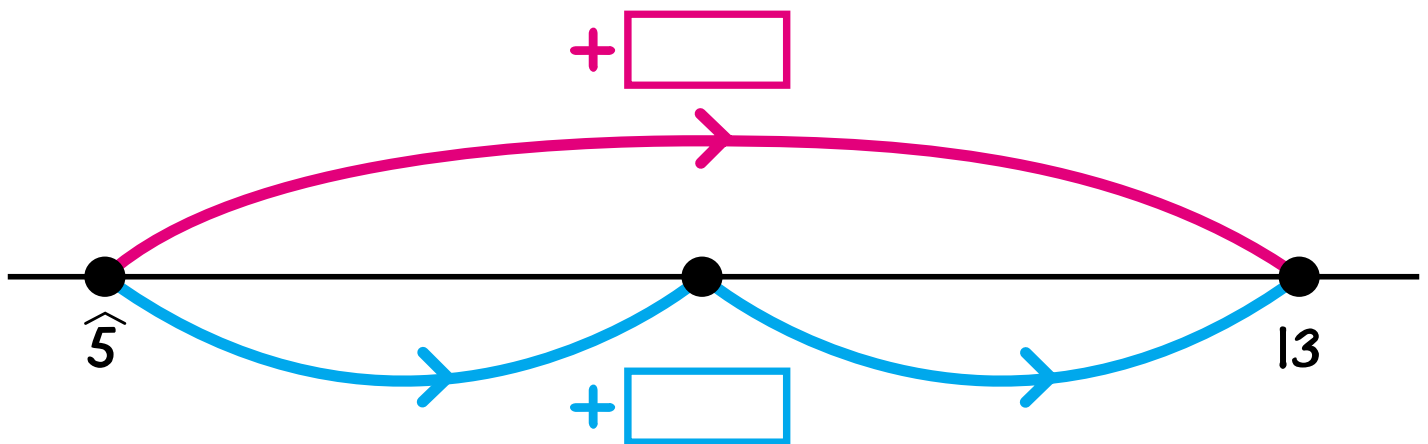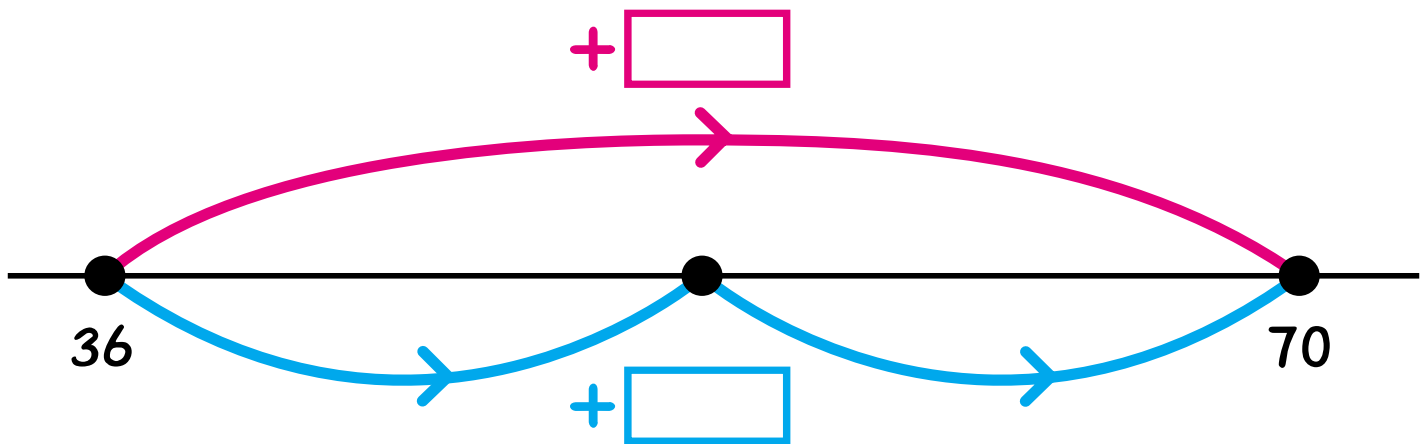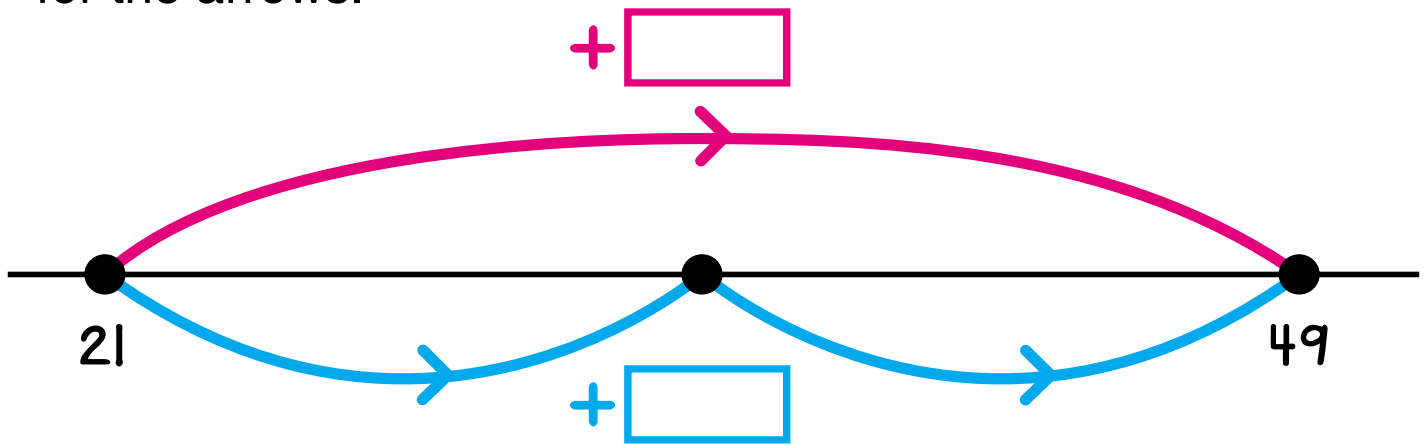
20

```
┌─────────────────────────────────────┐
│           Tom's Popcorn              │
│  Package (2 cups) of kernels         │
│  gives 80 cups of popped corn.       │
└─────────────────────────────────────┘
```

1. About how much popped corn do you get from $\frac{1}{2}$ cup of kernels? _____

2. Marcie popped a cup of Tom's popcorn kernels. She wants to share it with the 10 students on her volleyball team. About how much popped corn could each team member get? _____

3. Ms. Travis wants about 300 cups of popped corn for the school party. How many packages of kernels should she buy? _____

4. You need 10 cups of popped corn to make 8 popcorn balls. How many popcorn balls could you make from 1 cup of kernels? _____

Put these numbers in the string picture.

$\quad$ 1 $\qquad$ 10 $\qquad$ 15 $\qquad$ $\widehat{5}$ $\qquad$ 0

Positive divisors of 20

Odd numbers
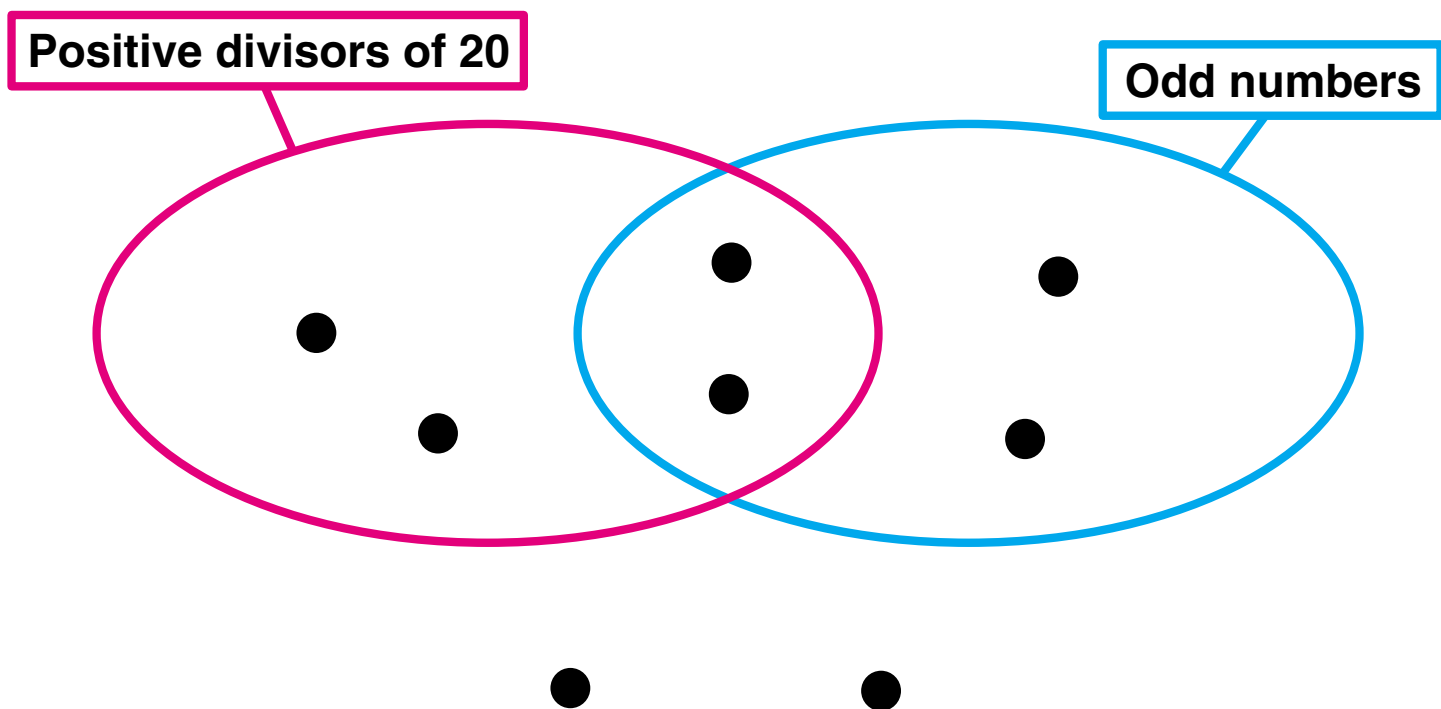
Label the other three dots with numbers of your choice.

Study the picture of towers and complete these statements.

A tower with one window uses __8__ small squares.

A tower with two windows uses __13__ small squares.

A tower with three windows uses __18__ small squares.

A tower with four windows uses _____ small squares. Draw it.

A tower with five windows uses _____ small squares. Draw it.

18 squares

13 squares

8 squares

| Tower with one window | Tower with two windows | Tower with three windows | Tower with four windows | Tower with five windows |

How many small squares would a tower with six windows use? _____

How many small squares would a tower with ten windows use? _____

Draw as many 10x arrows as possible in this picture. One arrow is drawn for you.

10×

7.5

0.57

0.75

70.5

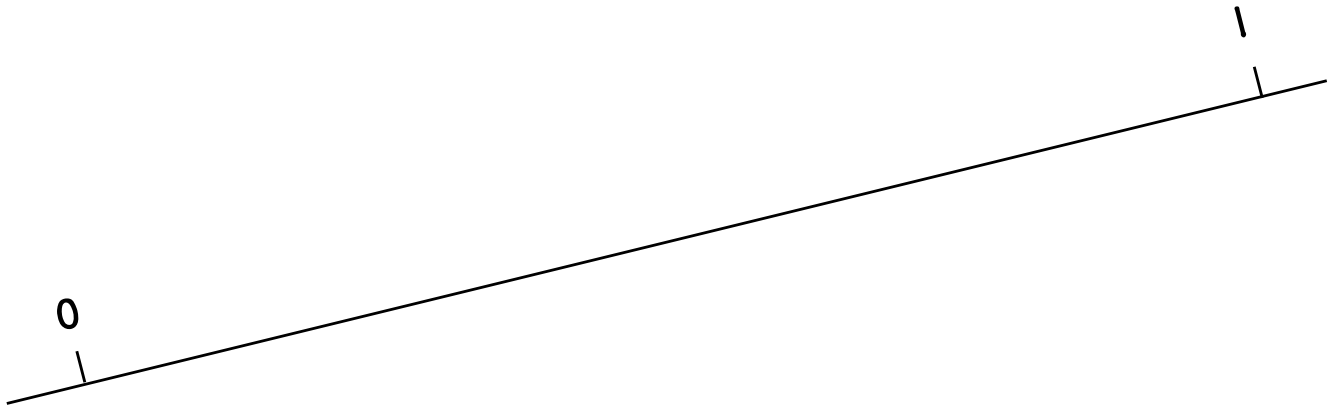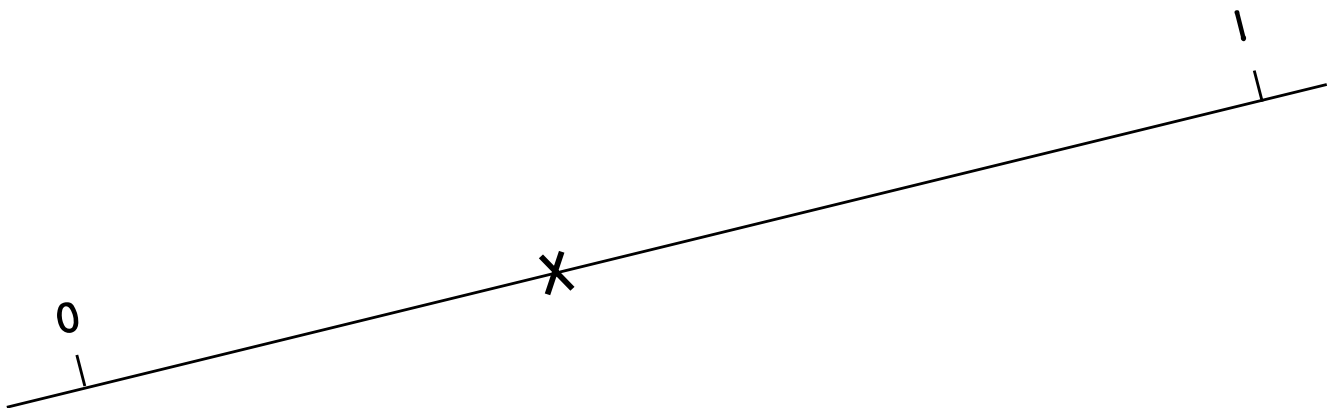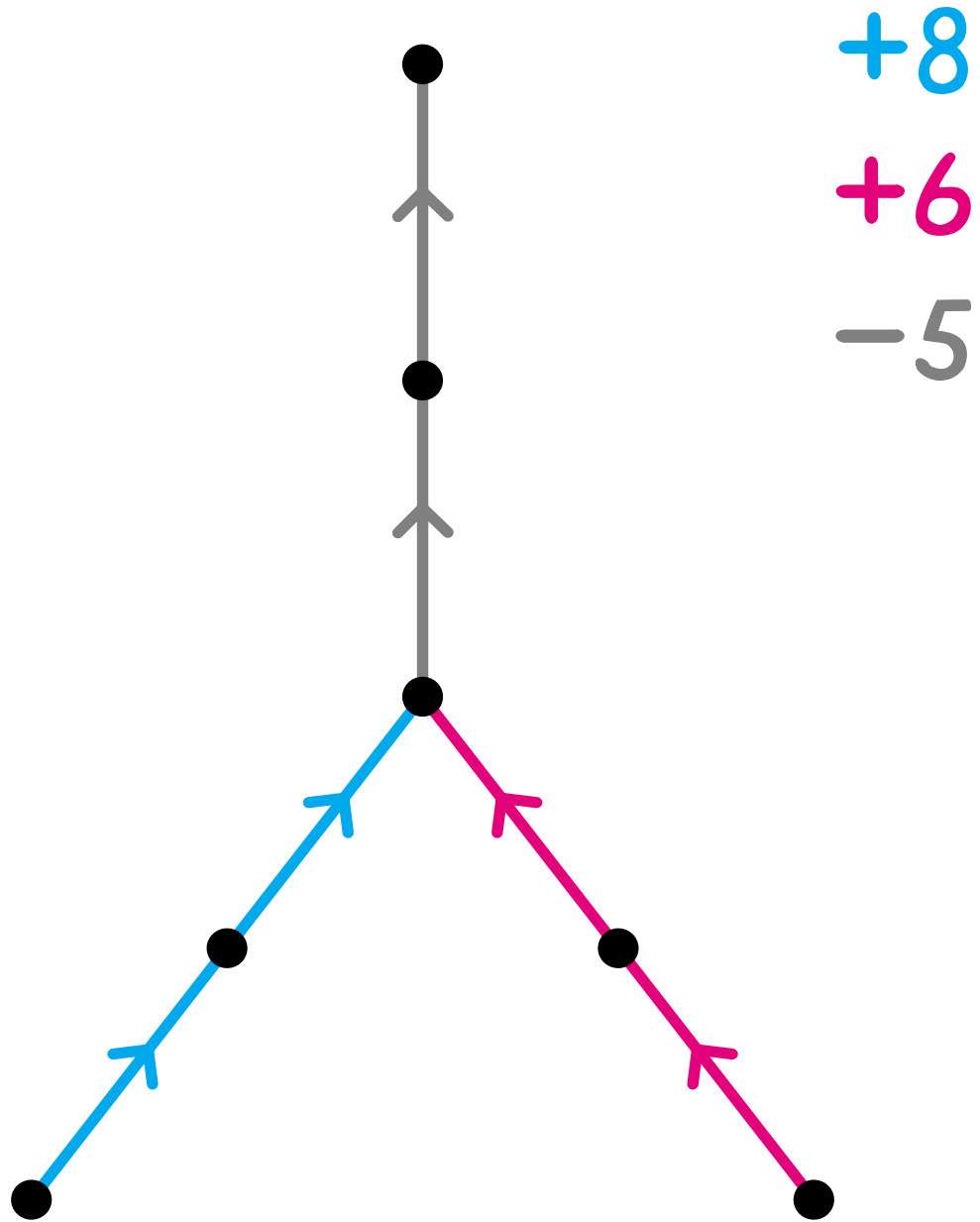75

5.07

750

5.7

705

50.7

57

Walter takes 15 steps in the Sasquatch game to go from 0 to 1. Show Walter's first 15 steps on the number line.

0

X marks Abby's second step in the Sasquatch game. How many steps does Abby take from 0 to 1? _____
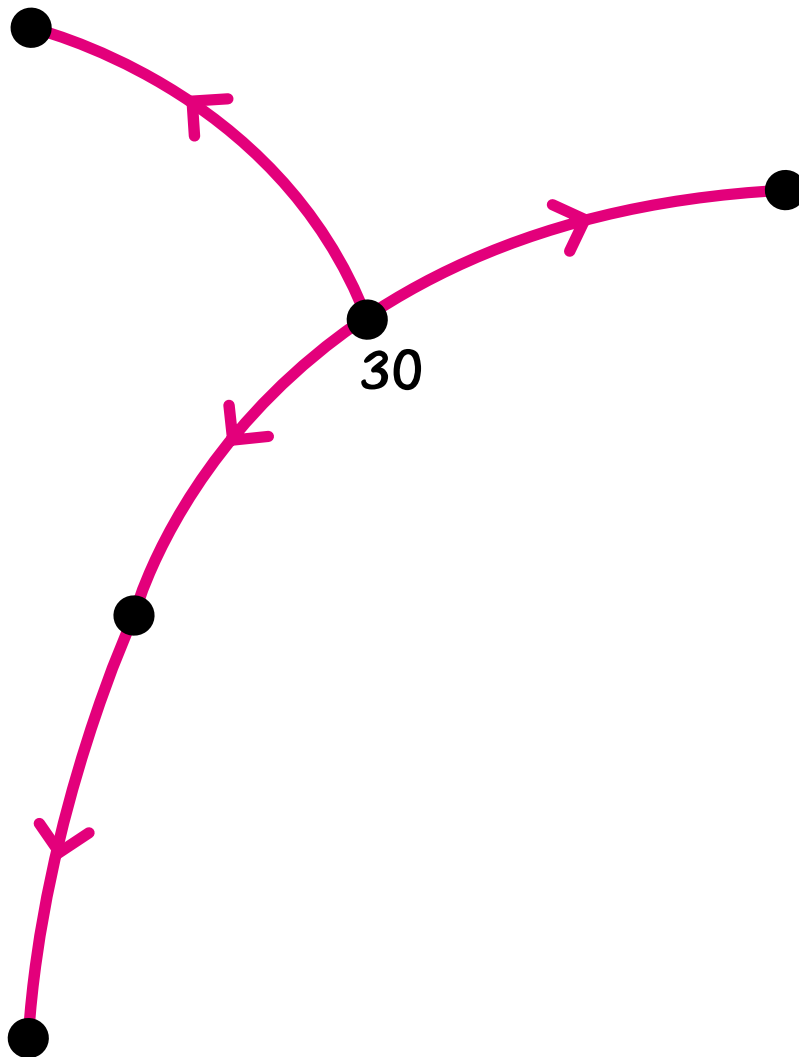
0

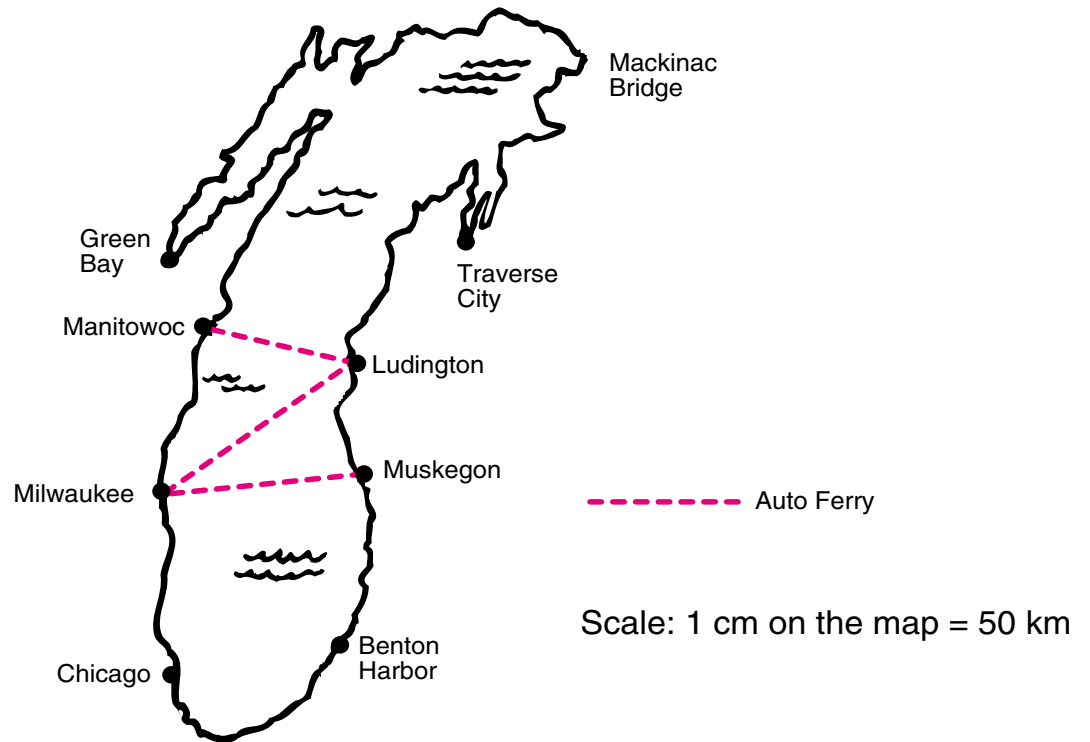17 and 28 are in this picture. Locate them and label their dots. Then label the other dots.

+8
+6
−5

Label the dots. Many solutions are possible.

is a multiple of

30

Lake Michigan

Scale: 1 cm on the map = 50 km

1. On the map, what is the length of a line segment between Chicago and Muskegon? _____ cm
   What is the real distance between Chicago and Muskegon? _____ km

2. An auto ferry travels from Milwaukee to Ludington and and then from Ludington to Manitowoc. On the map, what is the sum of the length of the line segments for this journey? _____ cm
   How far did this auto ferry travel? _____ km

3. The Tolkein family sailed from Green Bay to Traverse City. Draw a zigzag to show a route they could use. (Be sure not to cross any land.) On the map, what is the length of your zigzag? _____ cm
   How far would the Tolkeins travel if they used your route? _____ km

Using this information,

+9
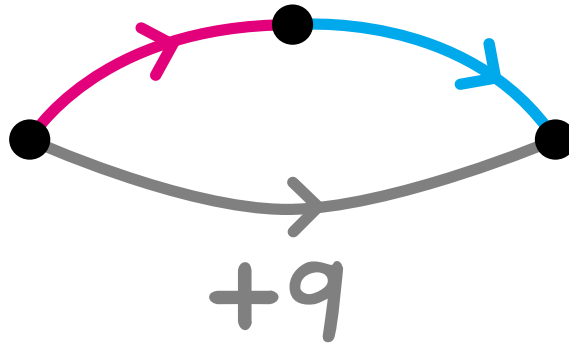
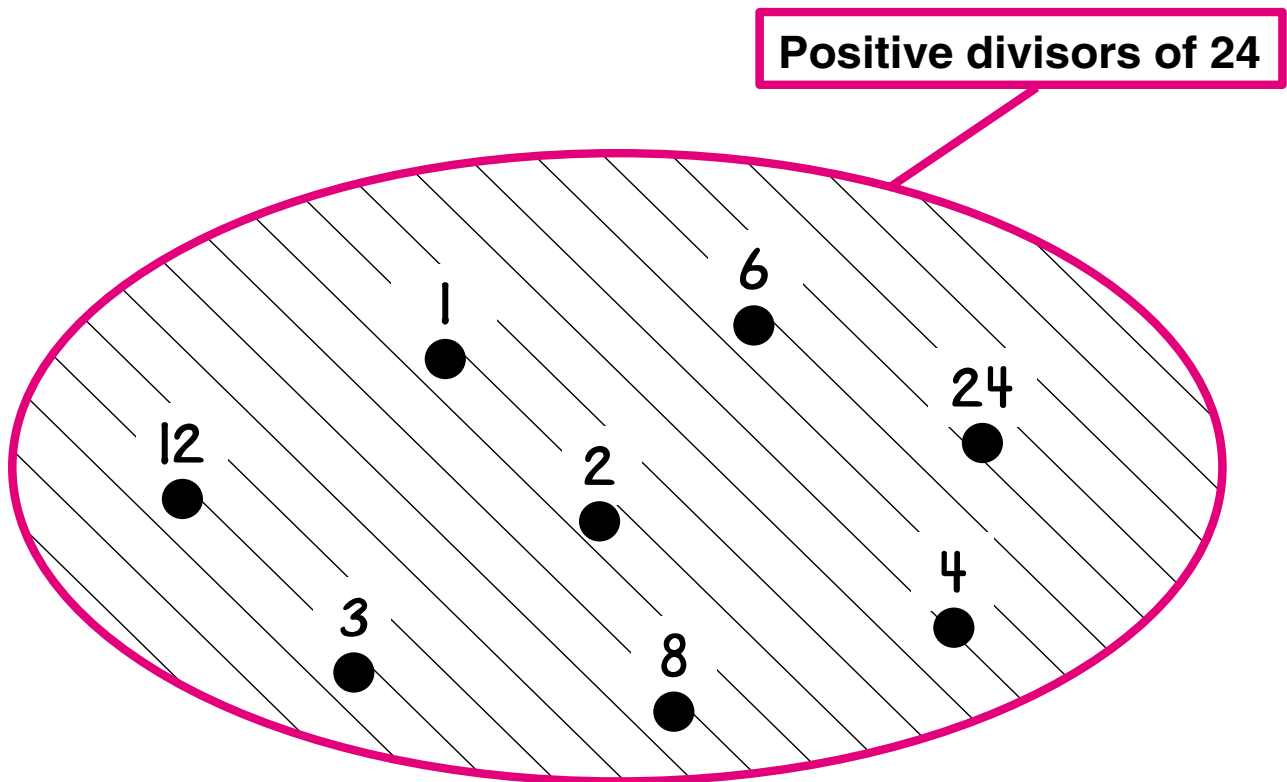… label the dots in the picture below.

51

59
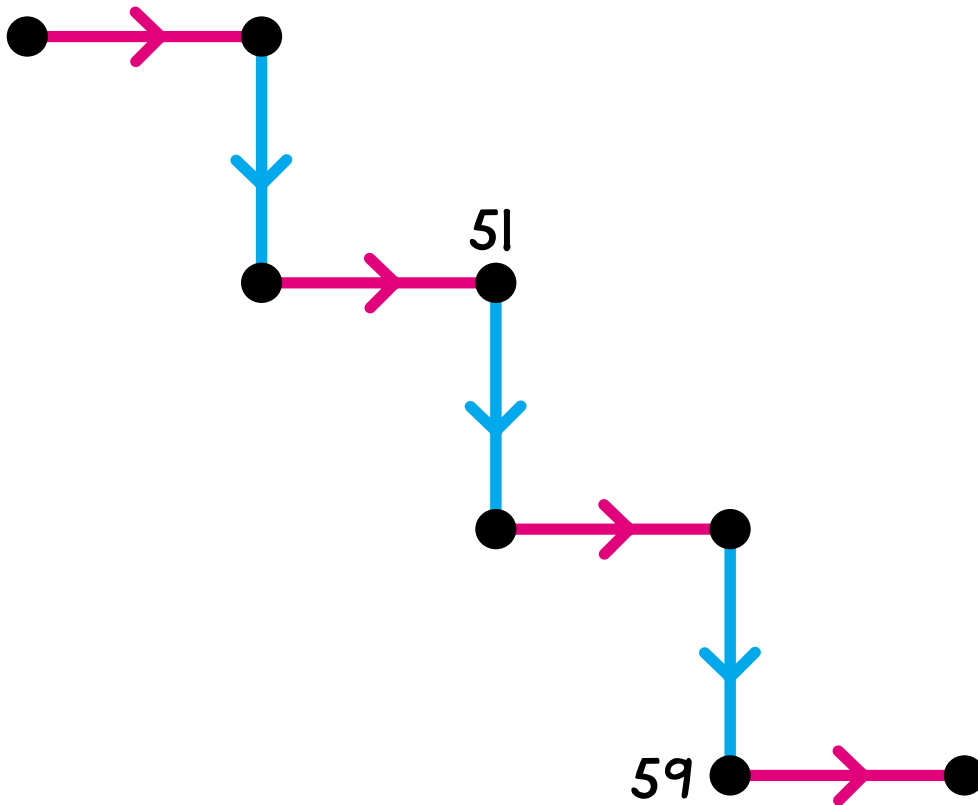
Draw as many +9 arrows as possible in the picture.
What are the red arrows for? _____
What are the blue arrows for? _____

This is the set of positive divisors of 24.

Positive divisors of 24

These are some statements about positive divisors of 24.
Circle **T** if the statement is true; circle **F** if it is false.

T F 1. 24 has at least five positive divisors.

T F 2. Exactly five positive divisors of 24 are multiples of 3.

T F 3. At most five positive divisors of 24 are less than 10.

T F 4. No positive divisor of 24 is more than 24.

T F 5. Every positive divisor of 24 is even.

T F 6. At least five positive divisors of 24 are multiples of 4.

1. Sarah, Jeremy, Maria, and Robert were the four winners in a contest. Winners scored more points than other players did.

   • Robert was the 3rd place winner.

   • Jeremy scored more points than Robert did but fewer points than Maria.
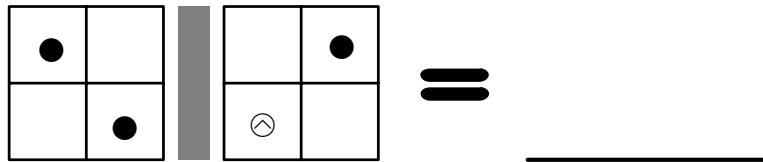
   Who was the 1st place winner? _____
                2nd place winner? _____
                3rd place winner? _____
                4th place winner? _____

_____

2. It is 3:15 p.m. and Nora wants to go to the zoo. She must be home by 5:45 p.m. for dinner. The walk between her house and the zoo takes Nora 20 minutes. How long can Nora stay at the zoo? _____
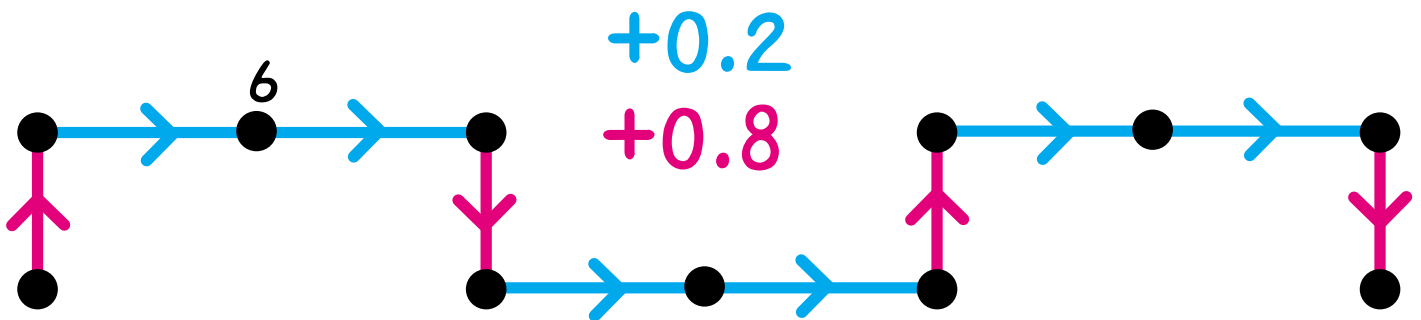
Bic is a secret number.

Clue 1

Bic can be shown on this Minicomputer by moving just the
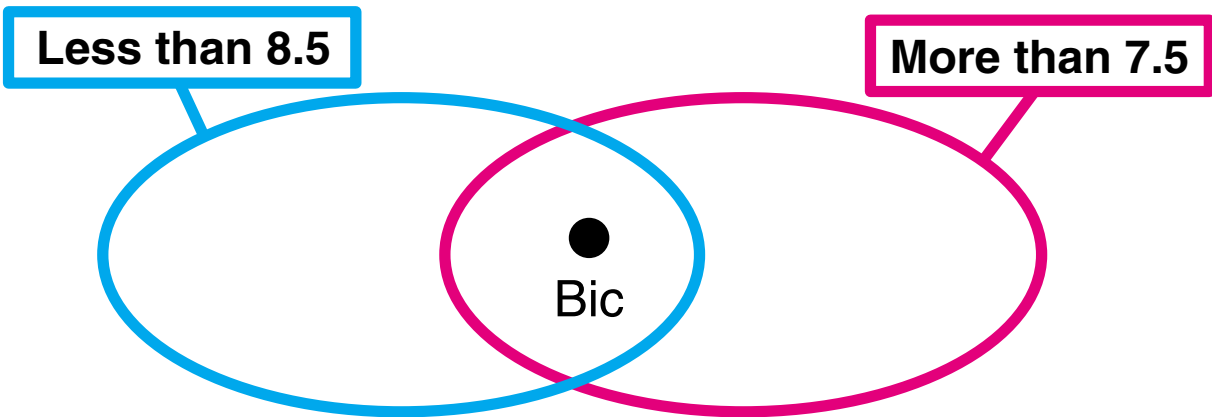⊘-checker to another square.

 = _____

Bic could be _____, _____, _____, _____, _____, _____, or _____.

Clue 2

Bic is in this arrow picture.

+0.2
+0.8

Clue 3

Less than 8.5   **More than 7.5**

Bic

Who is Bic? _____

32