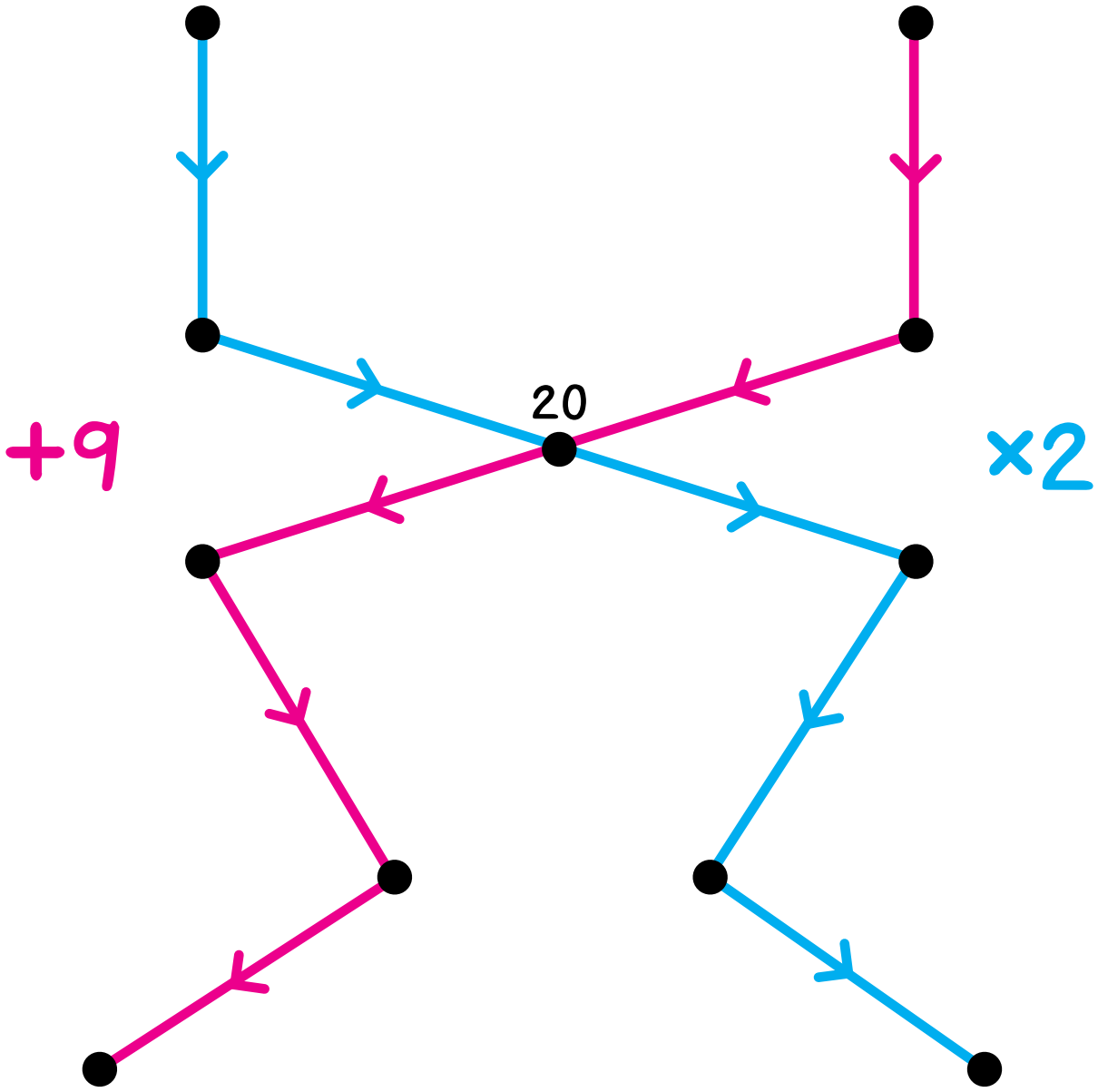
Name _____

Selection of Problems #5

Label the dots.



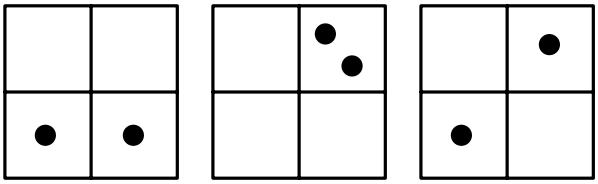
What is the greatest odd number in this picture? _____

What is the greatest multiple of 5 in this picture? _____

Fum a secret number.

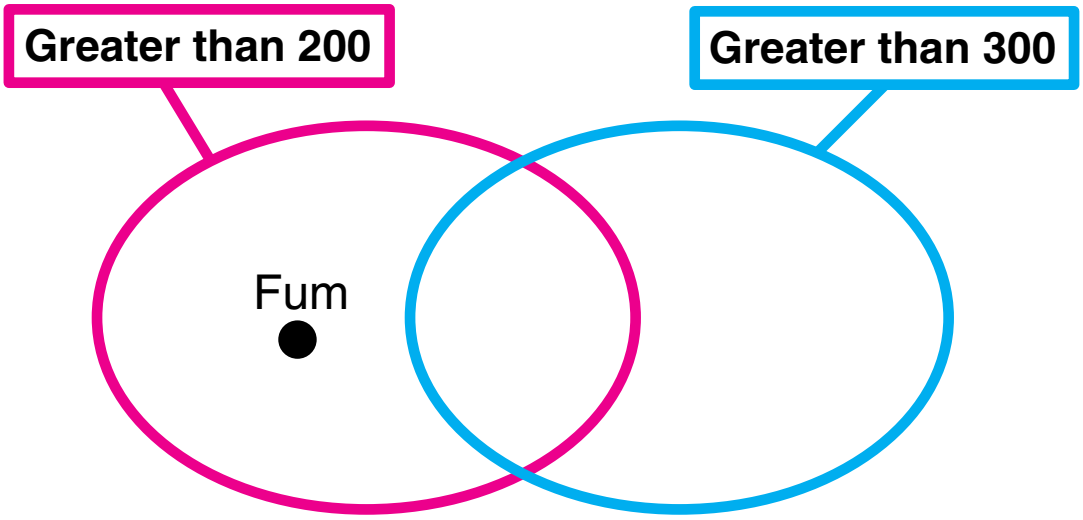
Clue 1

Fum can be shown on these Minicomputer boards by removing exactly one checker.



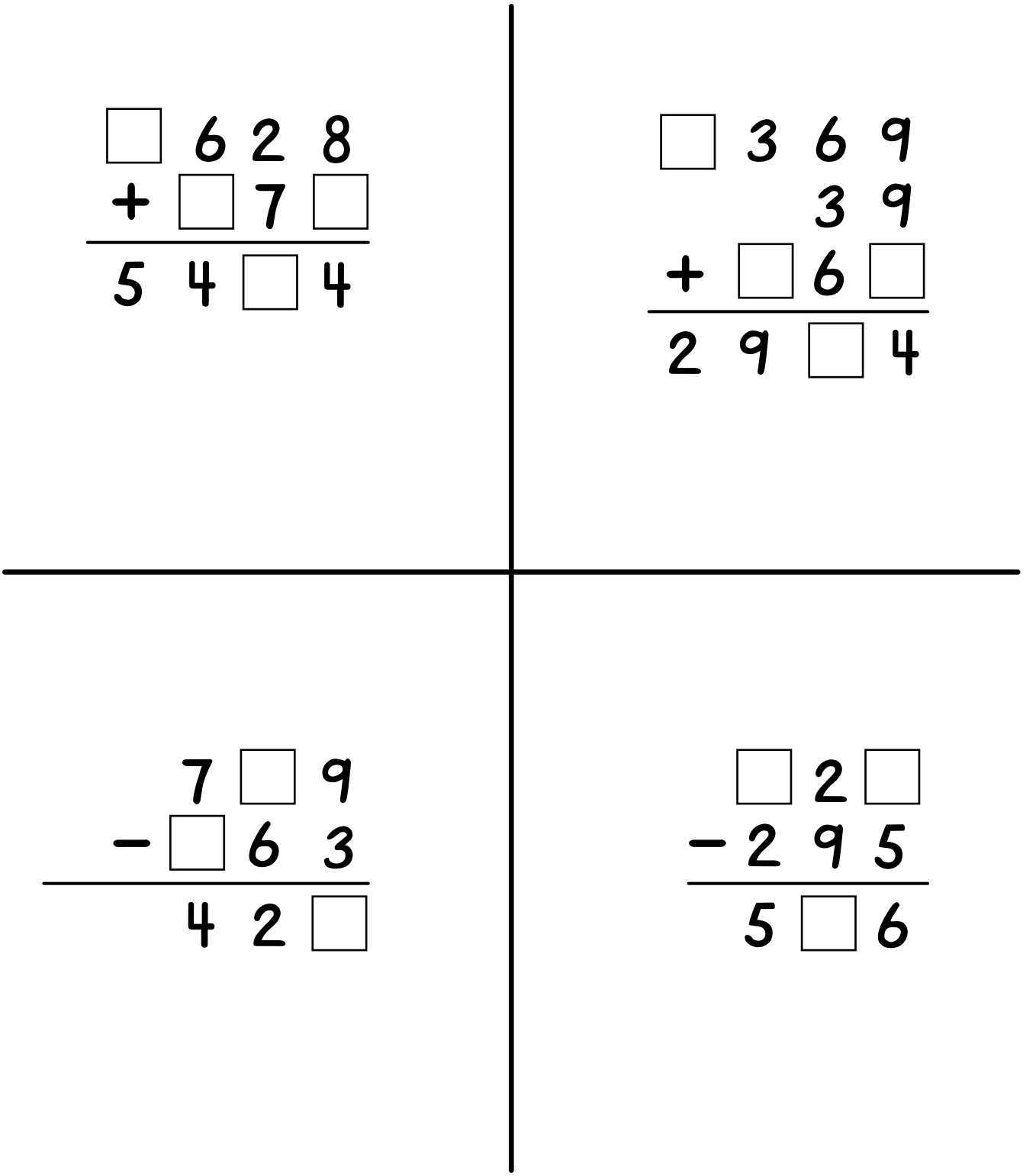
Fum could be _____, _____, _____, _____, or _____.

Clue 2



Who is Fum? _____

Put a single digit in each box to make the calculations correct.



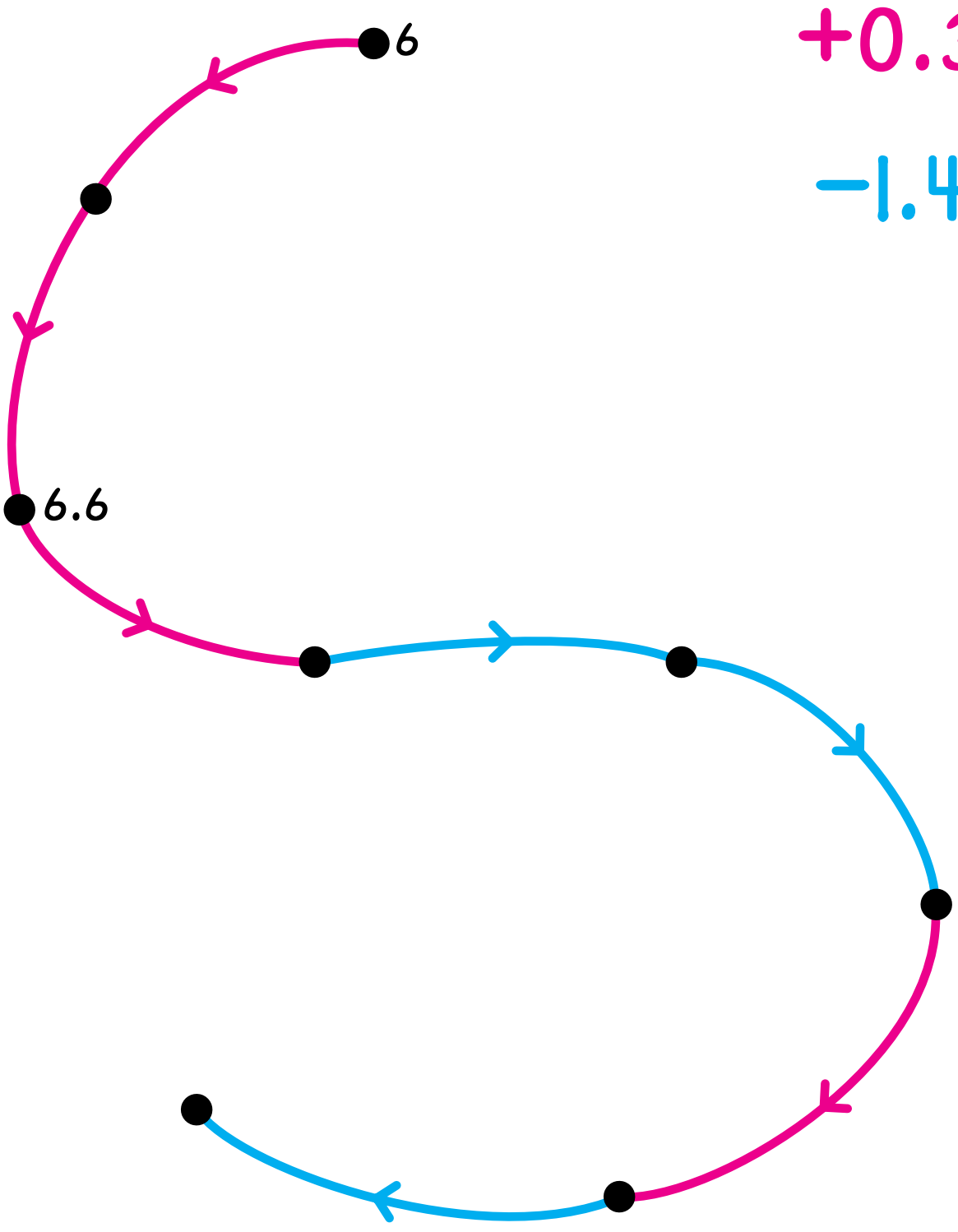
$$\begin{array}{r} \square\,628 \\ +\,\square\,7\,\square \\ \hline 54\,\square\,4 \end{array}$$

$$\begin{array}{r} \square\,369 \\ \quad\;\;39 \\ +\,\square\,6\,\square \\ \hline 29\,\square\,4 \end{array}$$

$$\begin{array}{r} 7\,\square\,9 \\ -\,\square\,63 \\ \hline 42\,\square \end{array}$$

$$\begin{array}{r} \square\,2\,\square \\ -\,295 \\ \hline 5\,\square\,6 \end{array}$$

Label the dots.



Put each number on the display of a calculator using just these keys:

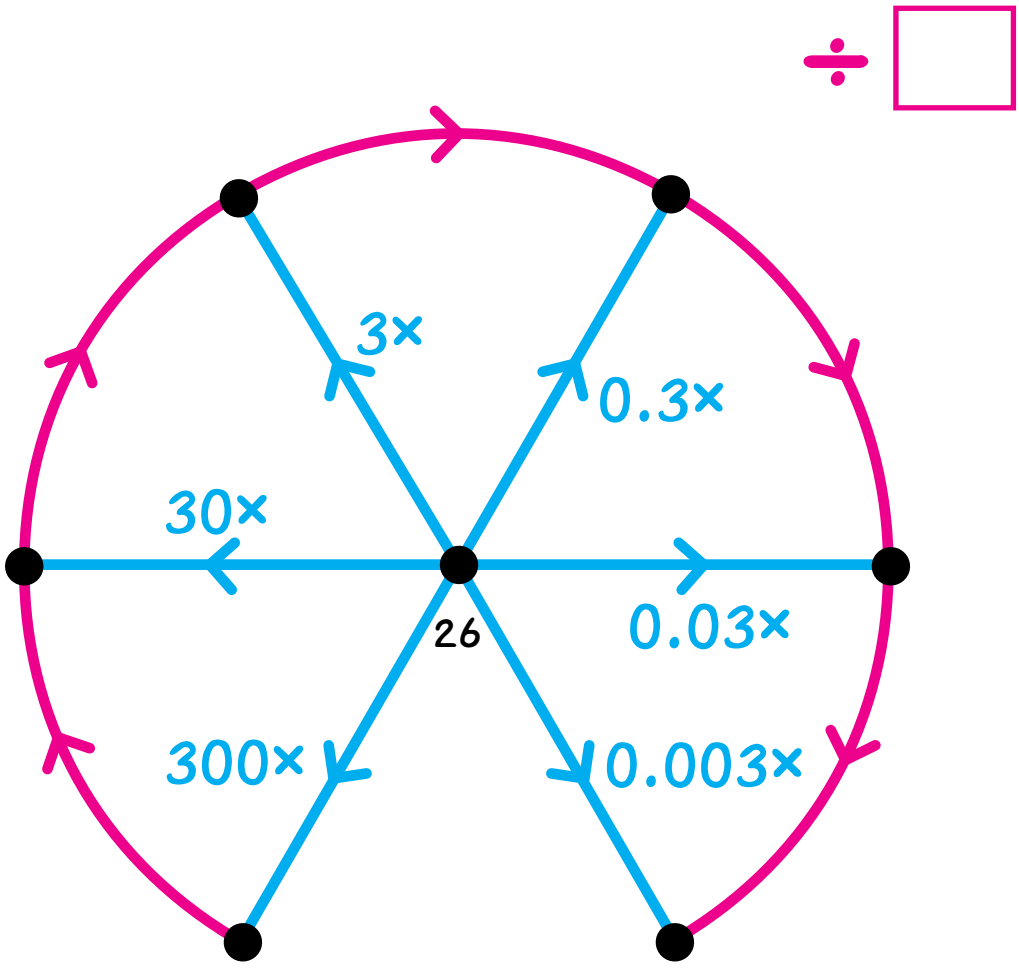
List the keys in the order you use them. You may use a key more than once.

It costs 1¢ each time you press a key. Try to spend less than the amount shown for each number.

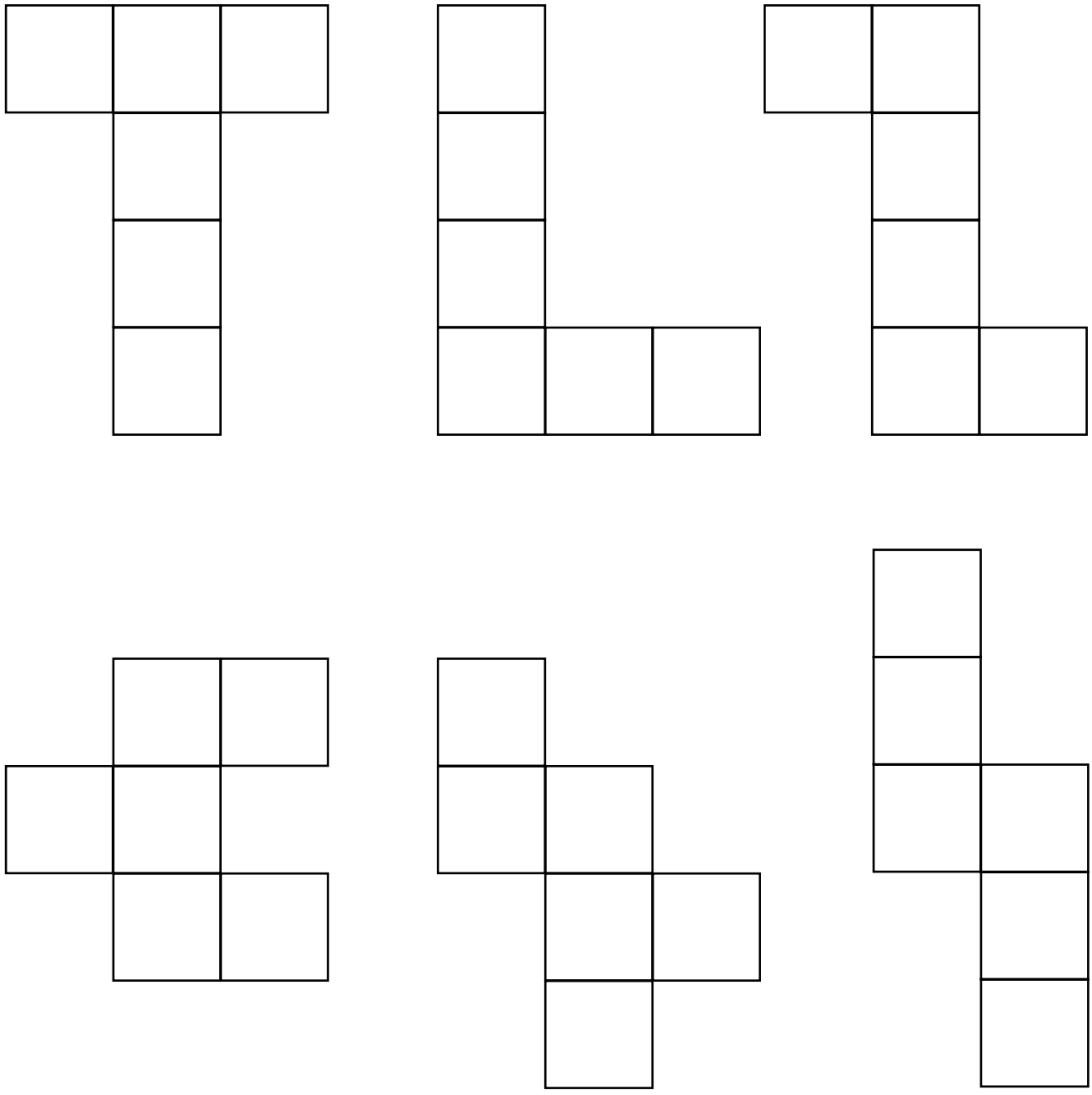
_____ 7 [9¢]

_____ 44 [10¢]

Label the dots and fill in the box for the red arrow.



Circle each shape that could be folded into a cube.



You should have circled four shapes.

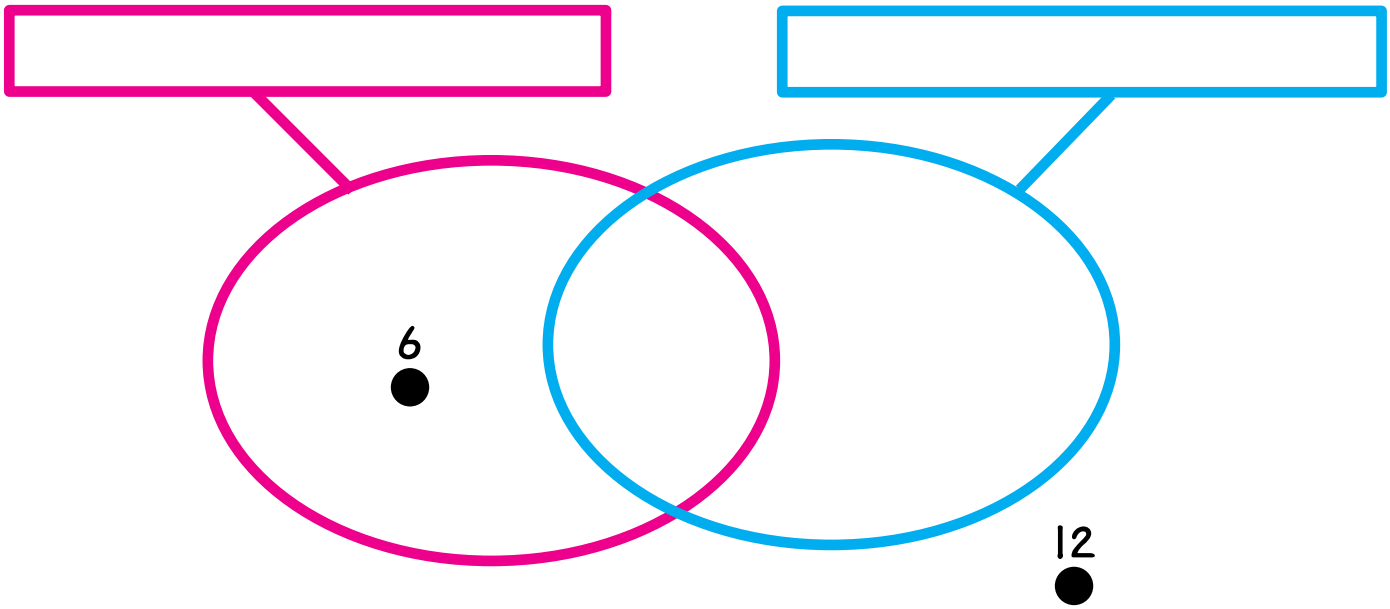
The red label is one of these:

Multiples of 2
Multiples of 3
Multiples of 4
Less than 20
Greater than 20
Positive divisors of 24
Positive divisors of 30

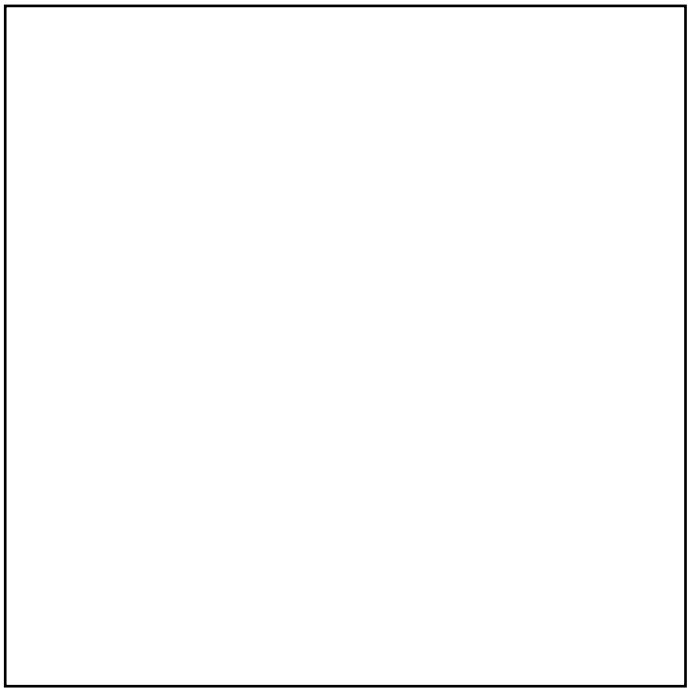
The blue label is one of these:

Multiples of 2
Multiples of 3
Multiples of 4
Less than 20
Greater than 20
Positive divisors of 24
Positive divisors of 30

Label the strings.



This square measures 9 cm on an edge. Using a ruler, carefully divide this square into nine smaller squares all the same size.



Fill in the blanks.

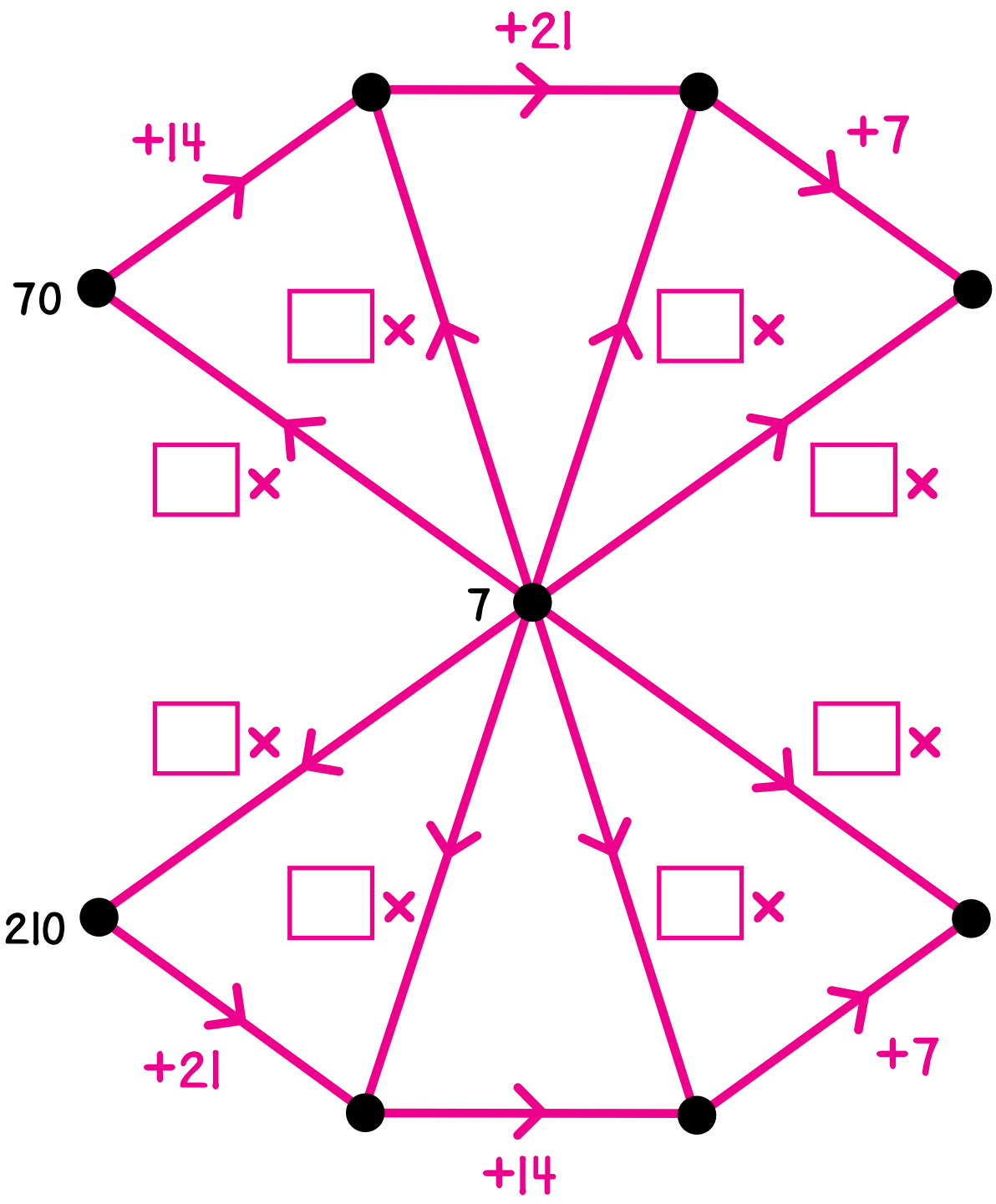
Each small square is what fraction of the large square? _____

Each small square has sides of length _____ cm each.

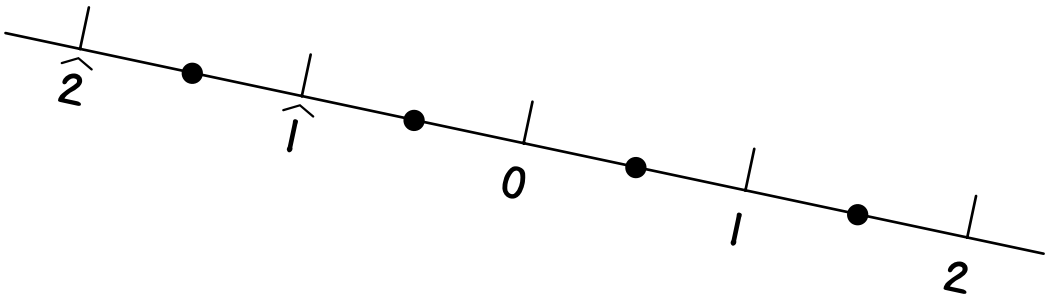
The area of each small square is _____ cm^2.

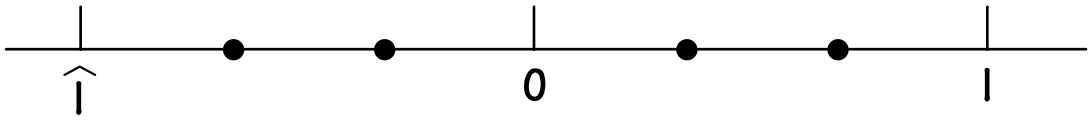
The area of the large square is _____ cm^2.

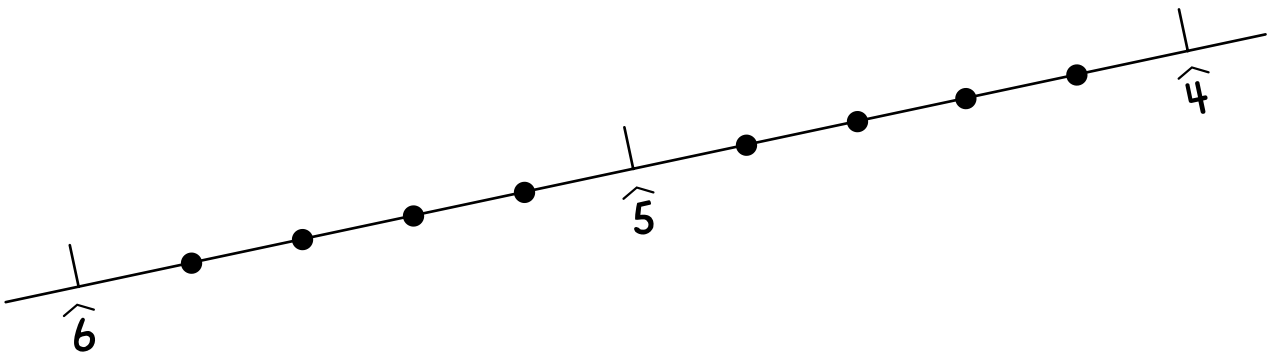
Label the dots and fill in the boxes for the red arrows.



Label the dots on each number line.

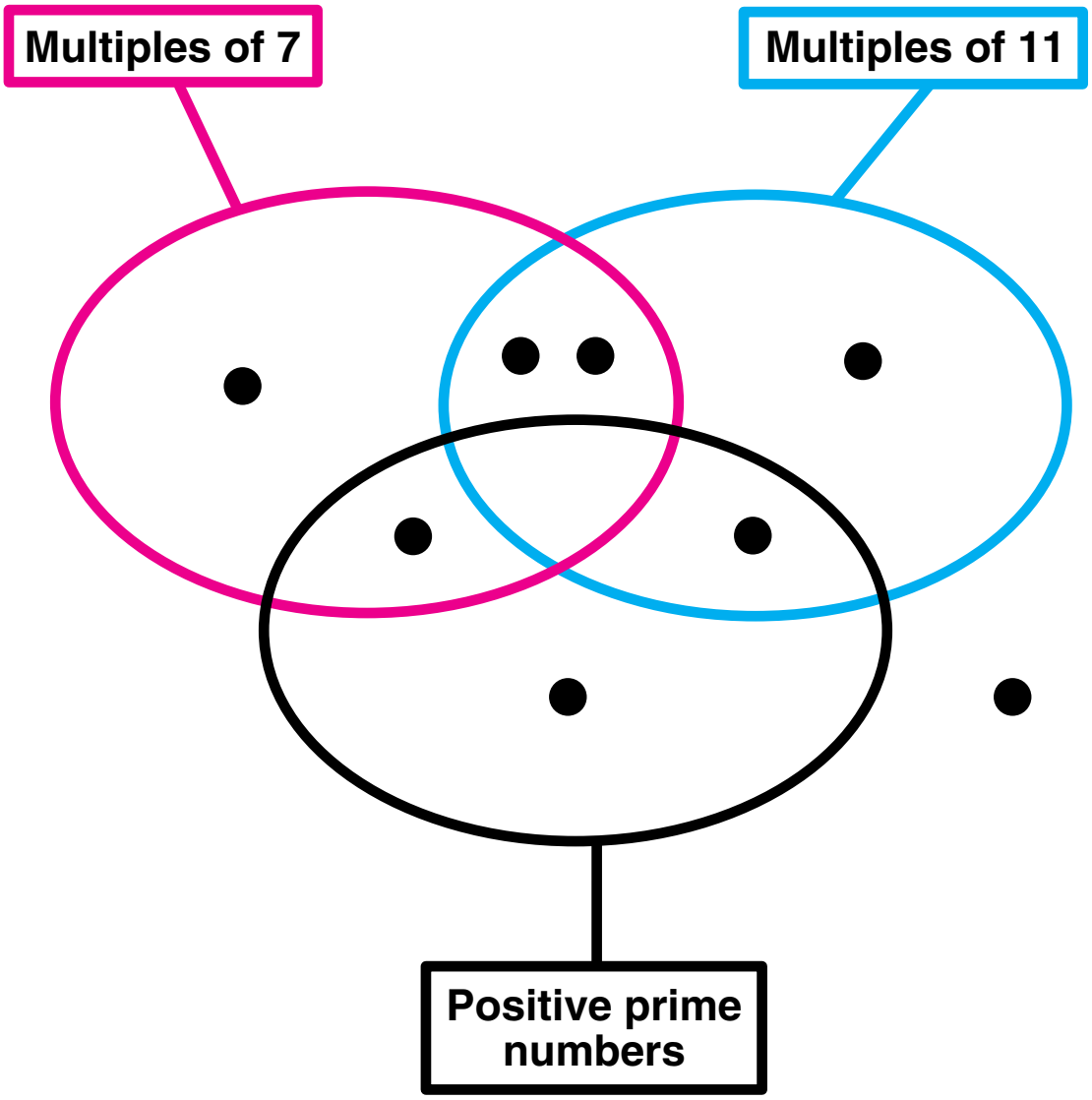






Label each dot in the string picture with one of these numbers.

0 1 5 7 11 22 28 77



Are there any numbers that belong in the middle region? _____

Fill in the boxes.

$21 \div 3 = \frac{21}{3} = 7$

$22 \div 3 = \frac{22}{3} = \square$

$23 \div 3 = \frac{23}{3} = \square$

$24 \div 3 = \frac{24}{3} = \square$

$25 \div 3 = \frac{25}{3} = \square$

$26 \div 3 = \frac{26}{3} = 8\frac{2}{3}$

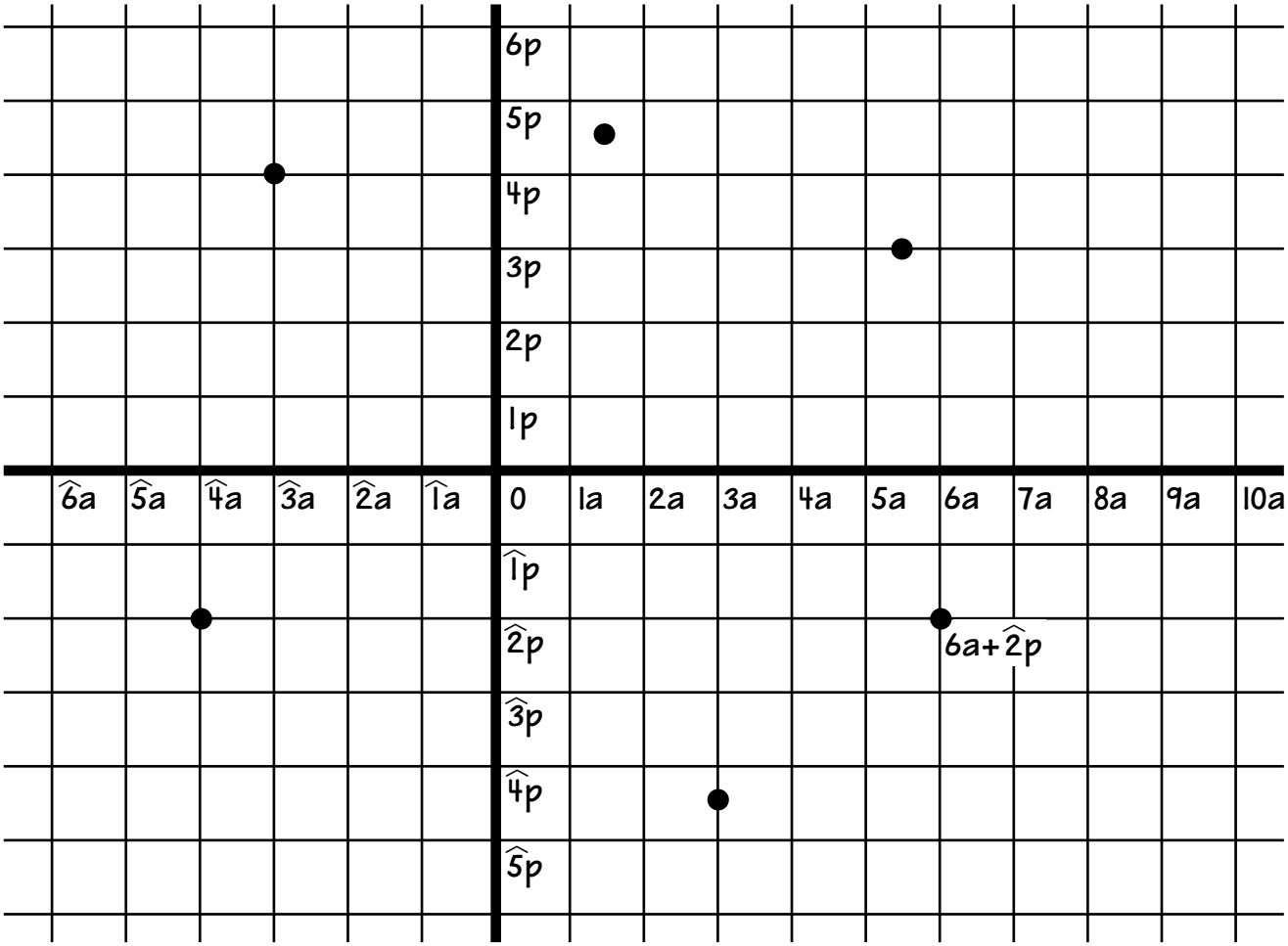
$27 \div 3 = \frac{27}{3} = \square$

$28 \div 3 = \frac{28}{3} = \square$

$32 \div 3 = \frac{32}{3} = \square$

The dots on the grid represent purchases/returns of apples and peaches.

Label the dots. One is done for you.



Draw and label dots for these purchases/returns.

$\widehat{4}$a + 5p

4.5a + $\widehat{3}$p

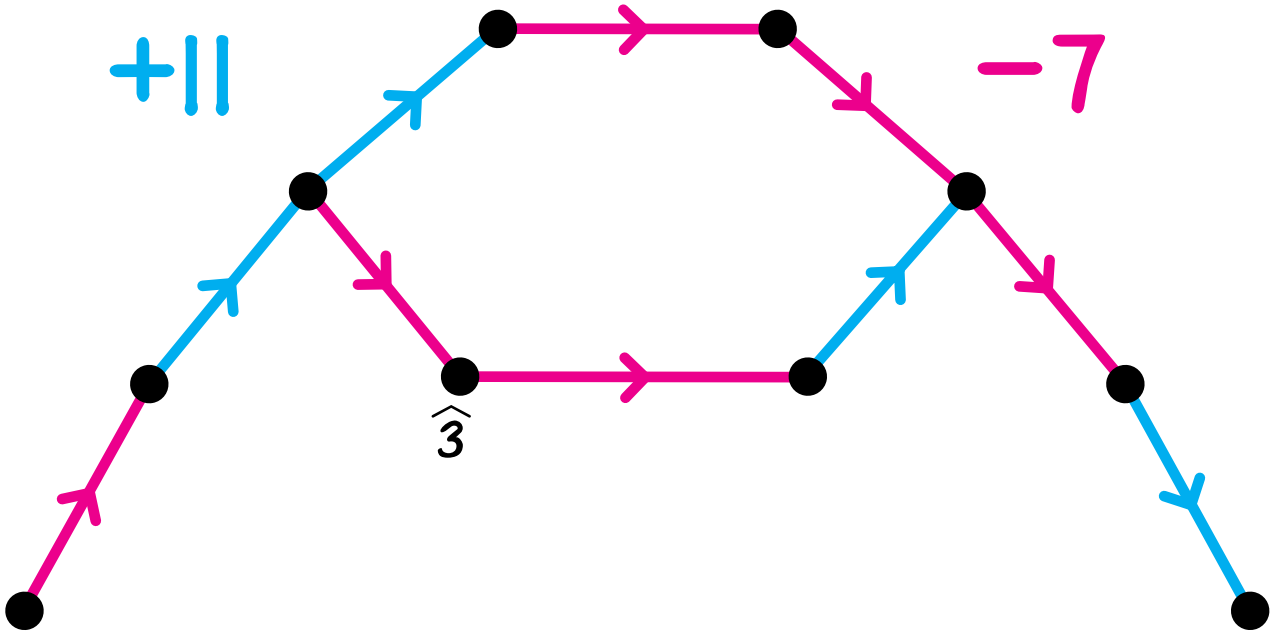
0a + $\widehat{3}$p

7.5a + 3.5p

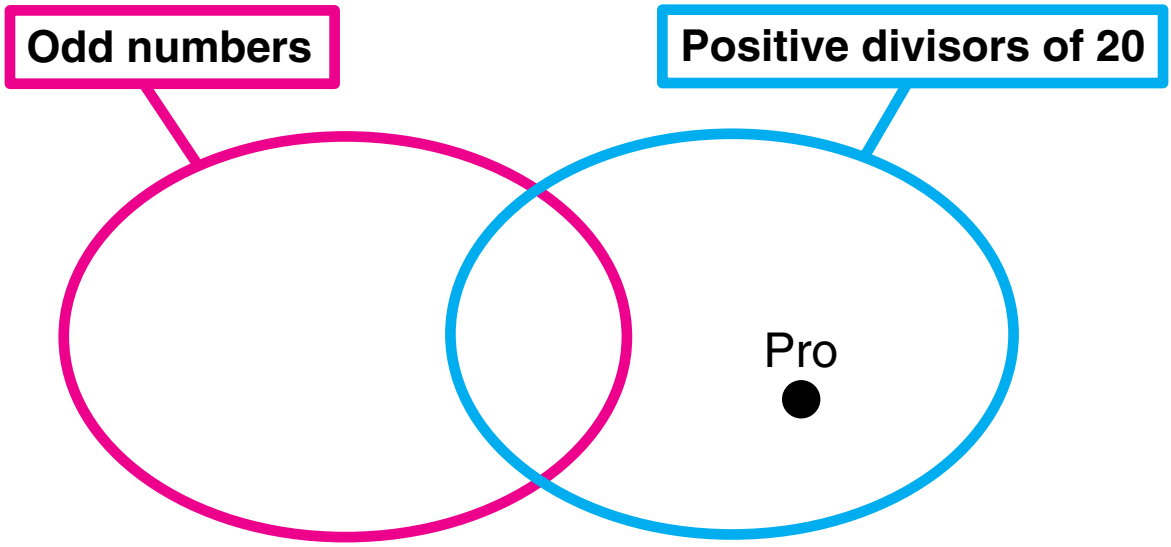
Pro is a secret number.

Clue 1

Pro is in this arrow picture.

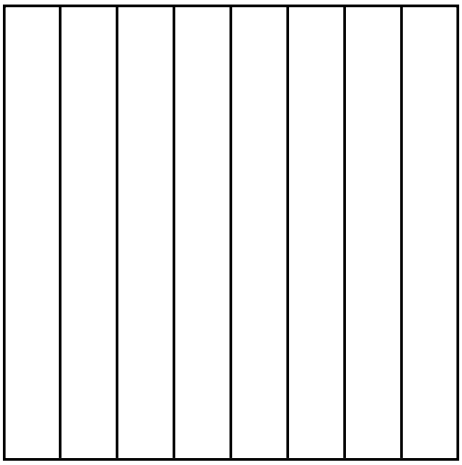


Clue 2

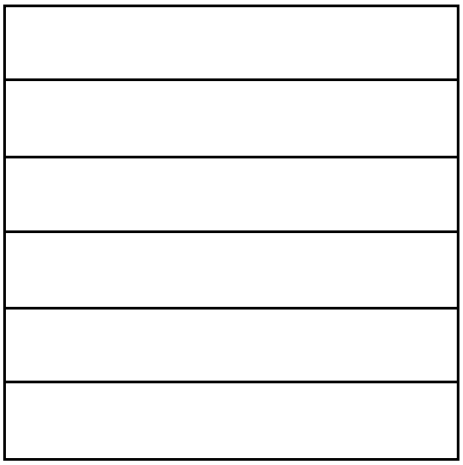


Who is Pro? _____

Shade three-eighths of Sara's cake.



Shade five-sixths of Amelia's cake.



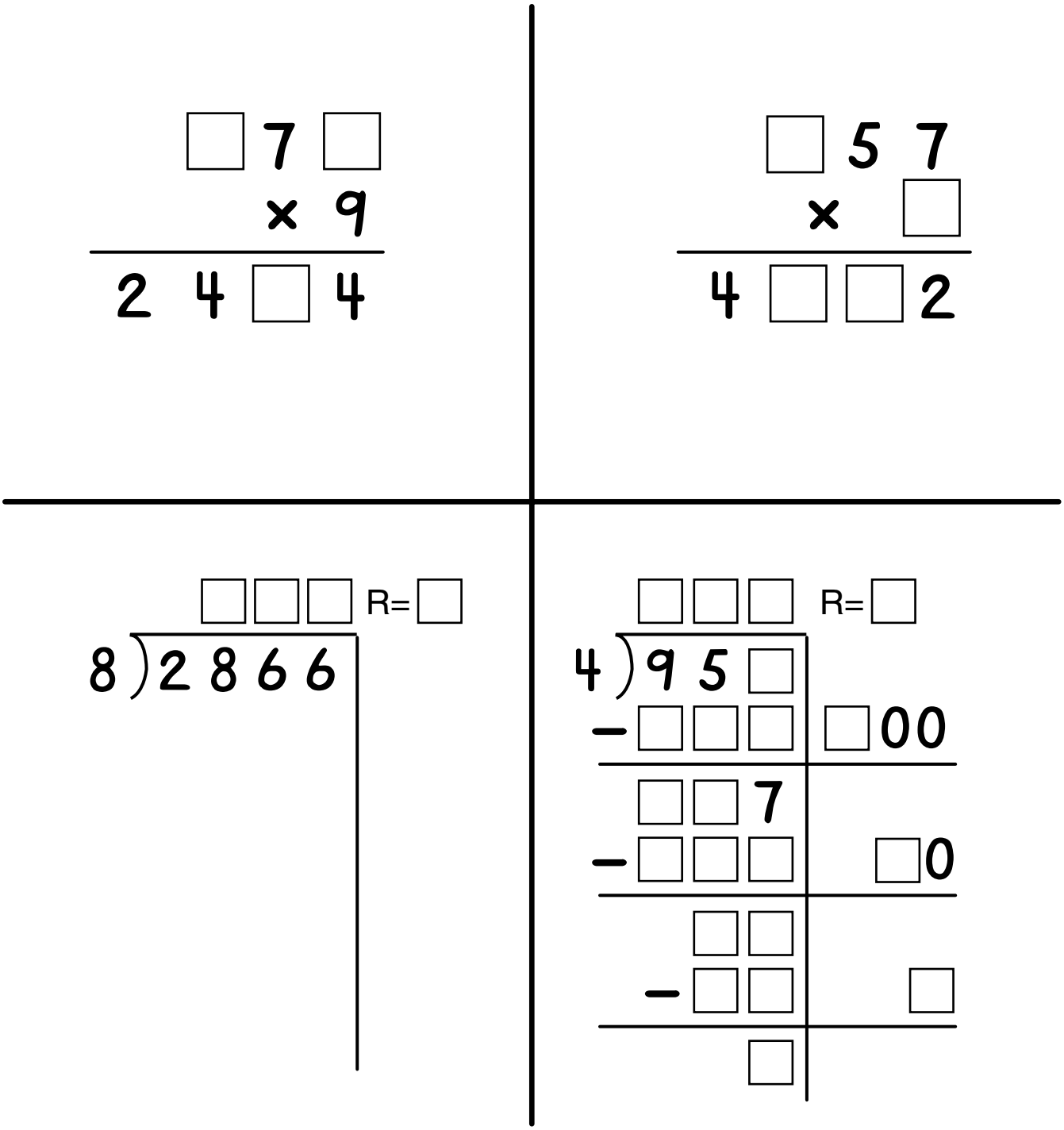
Make Sara's cuts on Amelia's cake.

Make Amelia's cuts on Sara's cake.

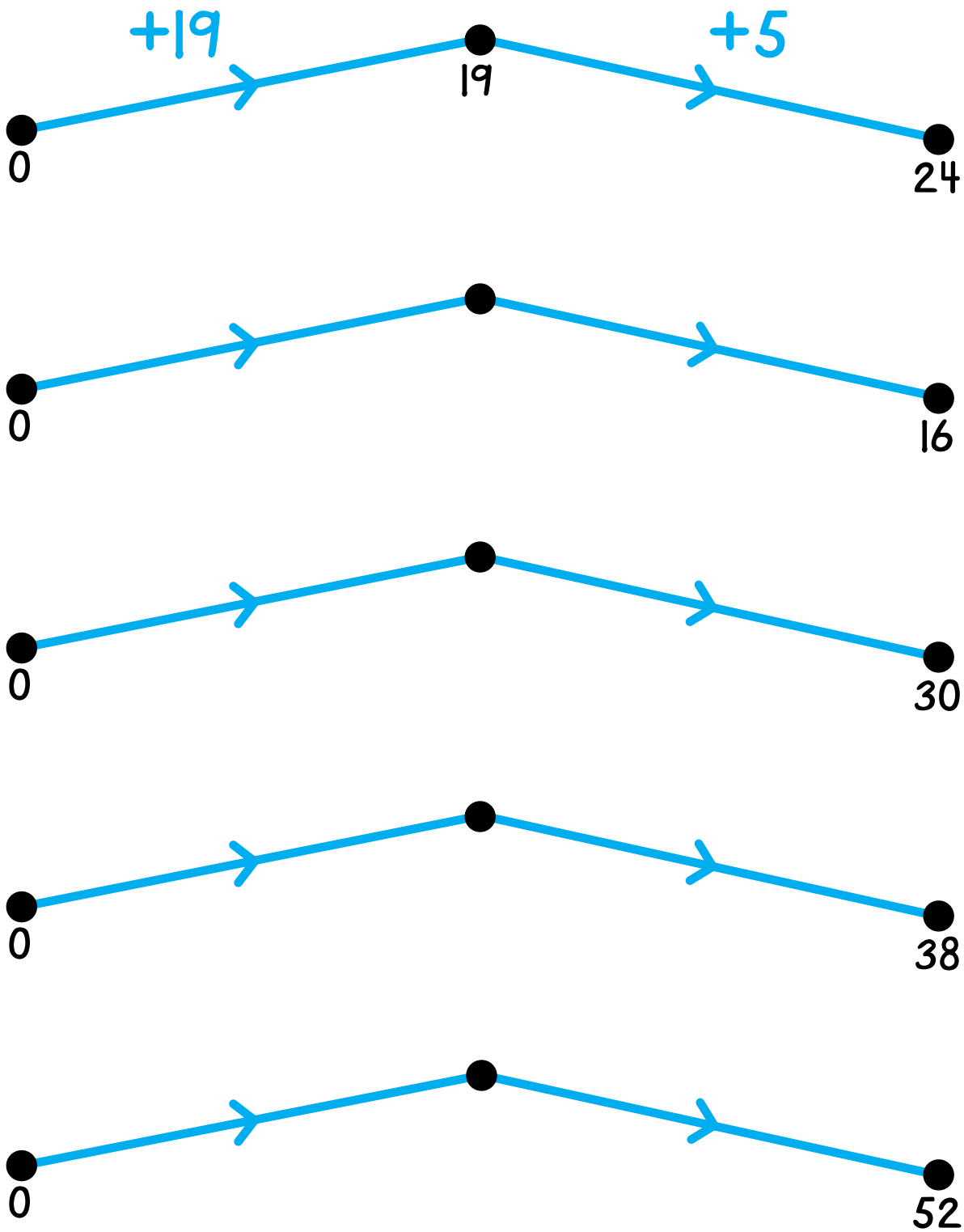
Now use the pictures to solve this problem.

$$\frac{3}{8} + \frac{5}{6} = \_\_\_\_\_$$

Put a single digit in each box to make the calculations correct.



In these six arrow roads, label each blue arrow + some prime number. The first road is done for you. Many solutions are possible.



Loy is a secret number.

Clue 1

The blue arrow could be for:

5×
÷2
+7

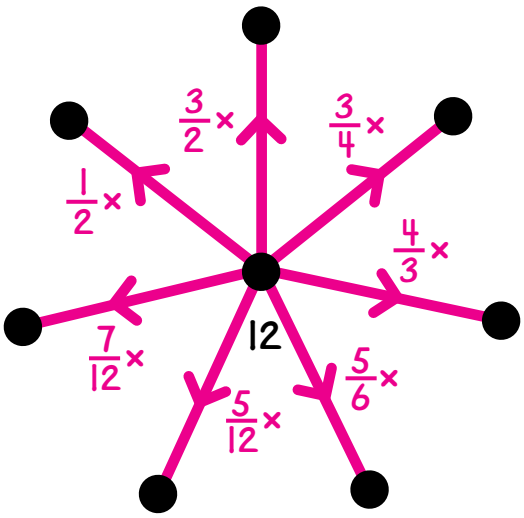
The red arrow could be for:

5×
÷2
+7

Loy could be _____, _____, _____, _____, _____, _____, _____, or _____.

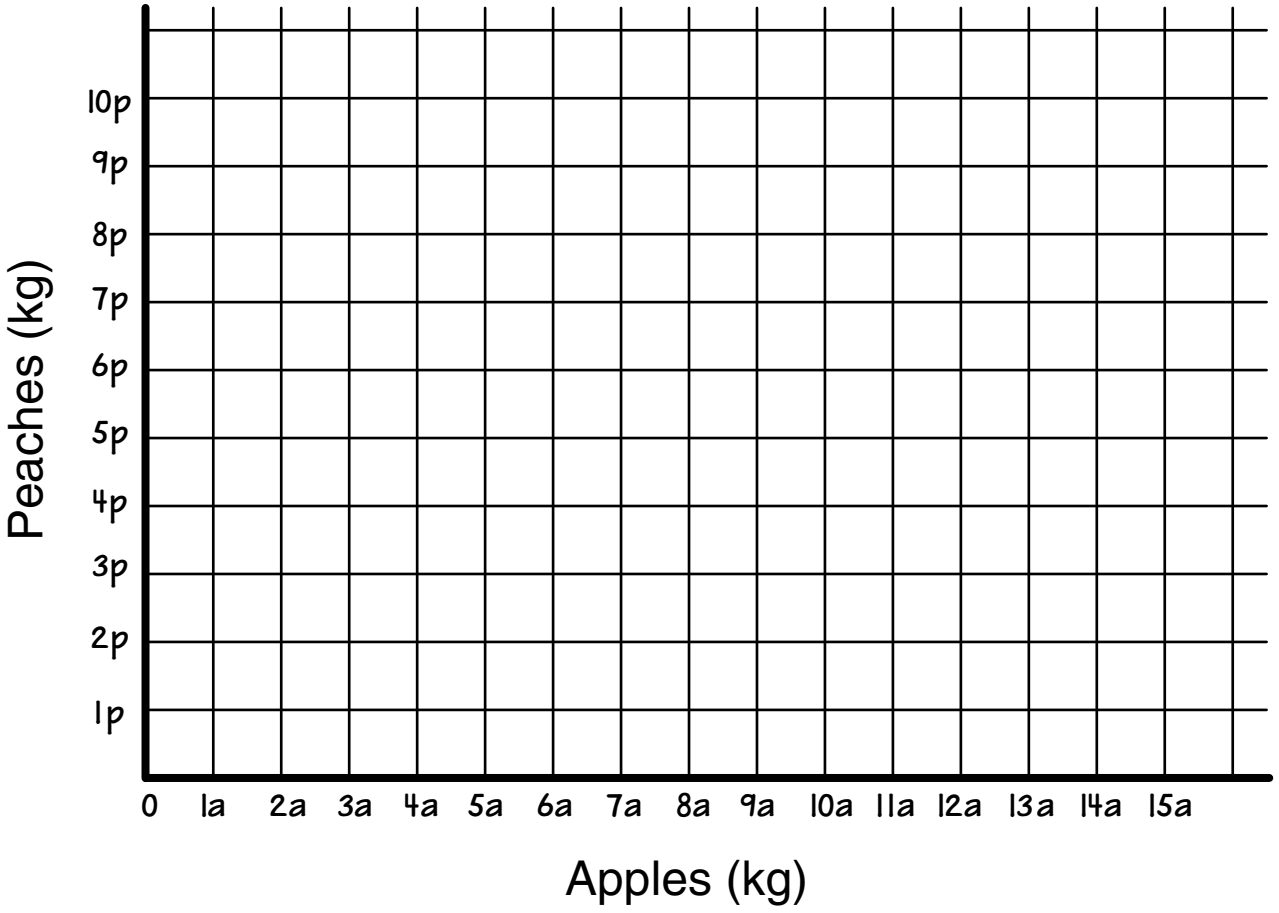
Clue 2

Loy is in this arrow picture. Label the dots.



Who is Loy? _____

Dots on this grid represent purchases of apples and peaches.



1. Mr. Plum bought a total of 9 kg of apples and peaches. List four purchases he could have made.

   _____ _____ 6.5a + ____p ____a + 4.36p

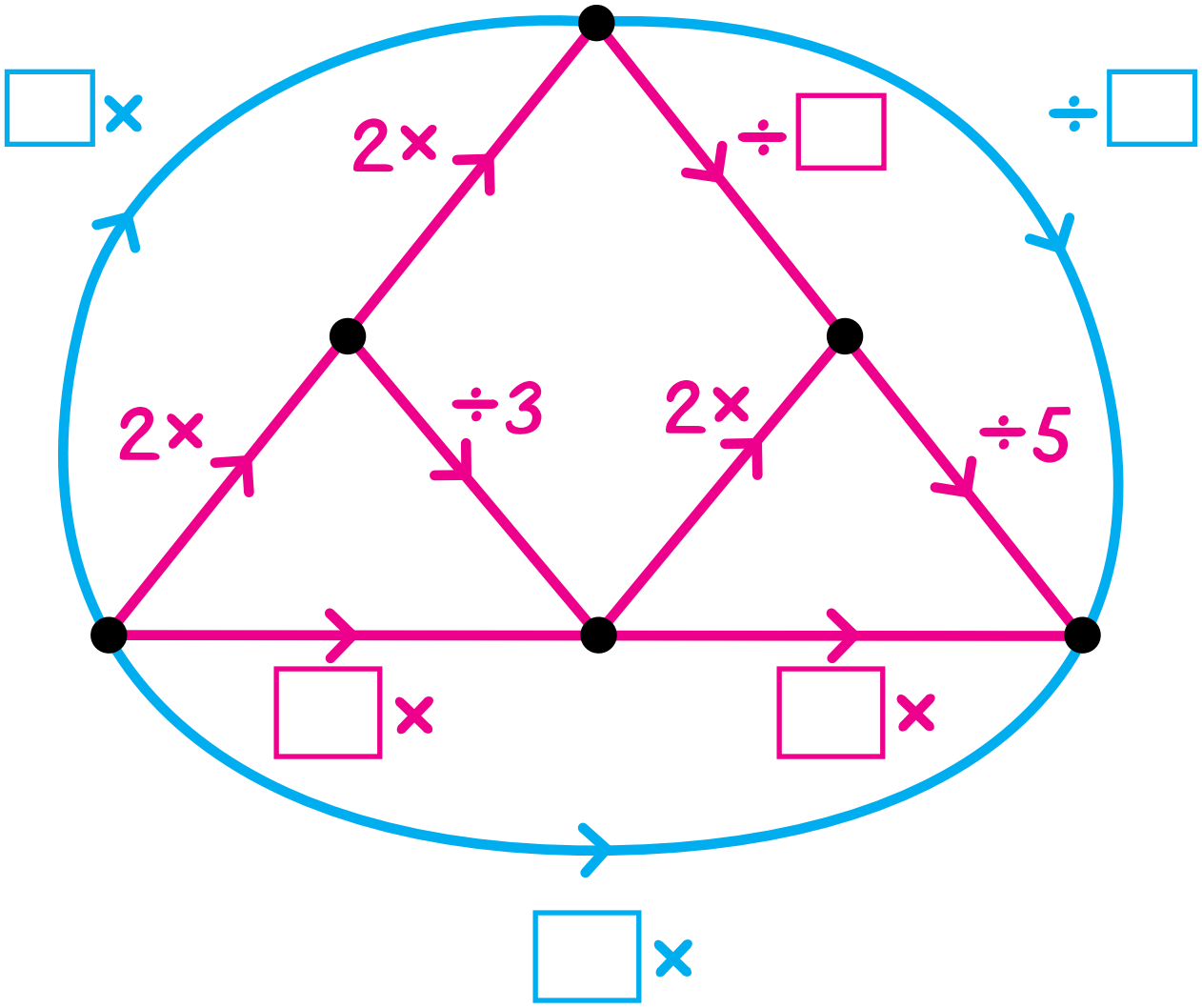
   Draw red dots for these purchases. Draw a red line segment to show all 9 kg purchases.

2. Ms. Blossom bought two more kilograms of apples than peaches. List four purchases she could have made.

   _____ _____ 8.2a + ____p ____a + 8.7p

   Draw blue dots for these purchases. Draw a blue line segment connecting these dots.

Fill in the boxes for the arrows.



Multiply.

$\frac{2}{3} \times \frac{2}{5} = \square$

$\frac{5}{6} \times \frac{3}{8} = \square$

$\frac{4}{9} \times \frac{1}{3} = \square$

$\frac{4}{7} \times \frac{1}{2} = \square$

Locate these numbers on the number line.

$\frac{1}{2}$ $\frac{1}{8}$ $\frac{7}{8}$ $\frac{1}{4}$ $\frac{3}{4}$

$\frac{5}{4}$ $\frac{5}{8} + \frac{7}{8}$ $\frac{1}{2} + \frac{1}{8}$

Draw all of the missing red arrows.

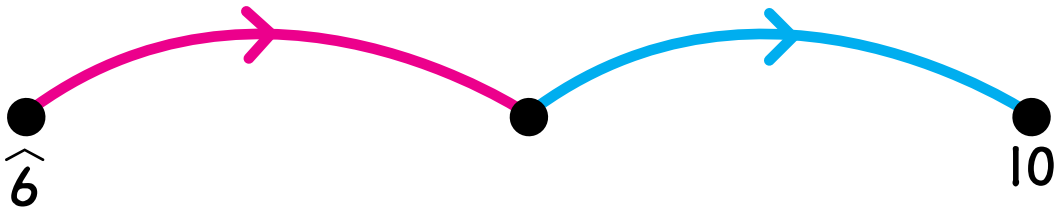
is less than →

$\frac{5}{4}$ ●

$\frac{3}{4}$ ● ● $\frac{3}{8}$

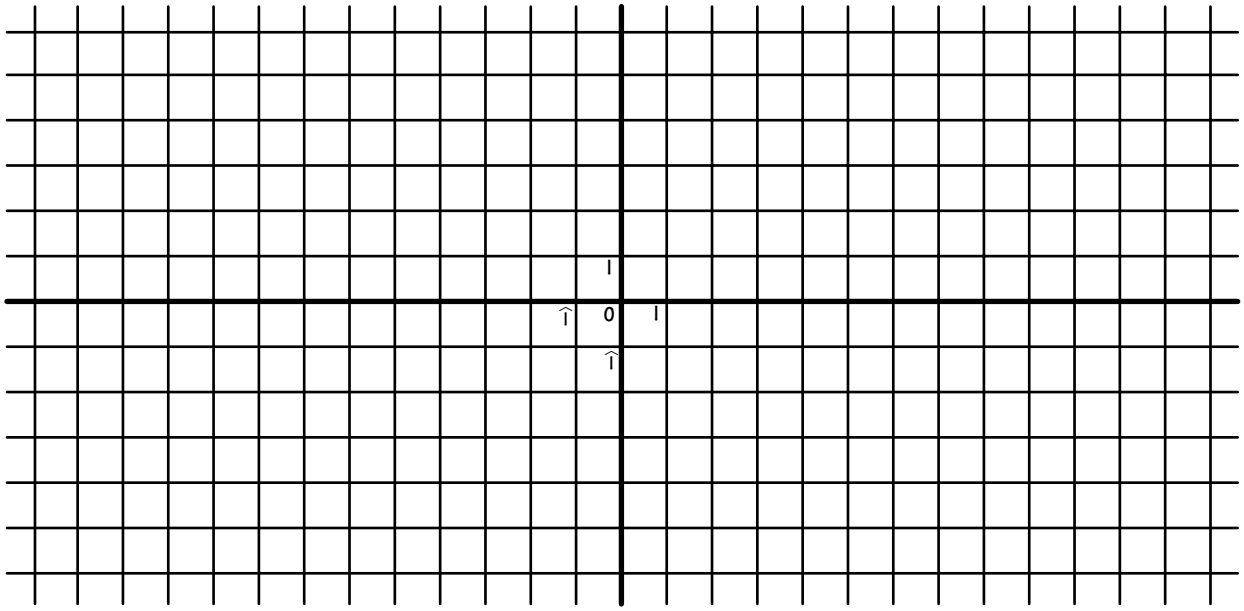
$\frac{1}{2} + \frac{1}{8}$ ● $\frac{5}{8} + \frac{7}{8}$ ●

Pair the tags.

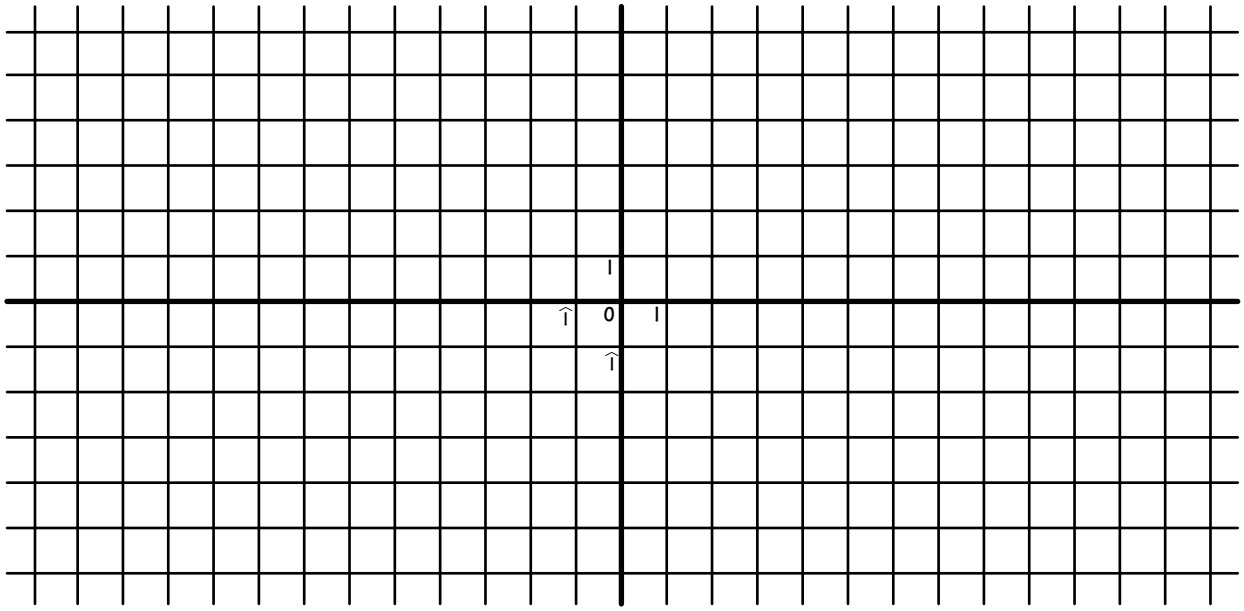


+21	+13
3×	$\frac{2}{3}$×
÷2	+13.5
+8.5	+28
$\frac{1}{3}$×	+12
+2.5	4×

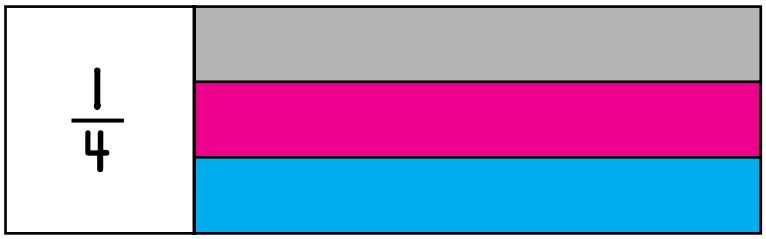
Three corners of a parallelogram are at ($\widehat{7}$, $\widehat{1}$), ($\widehat{5}$, 3), and ($\widehat{1}$, $\widehat{1}$).
Draw dots at these three corners.
Where could the fourth corner be? _____ Several answers are possible.
Then draw one of these parallelograms.



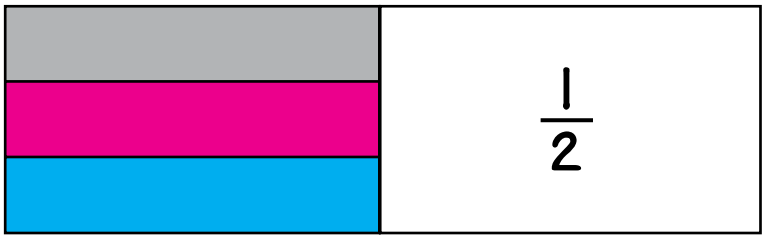
Three corners of a parallelogram are at ($\widehat{2}$, $\widehat{1}$), (2, 3), and (6, 1).
Draw dots at these three corners.
Where could the fourth corner be? _____ Several answers are possible.
Then draw one of these parallelograms.



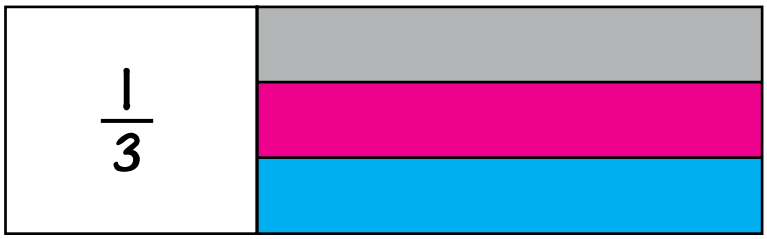
What fraction of each shape is red?



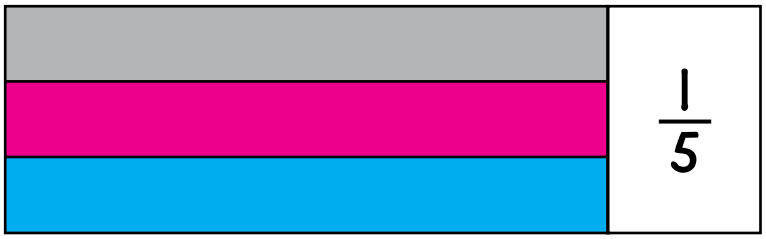
Red: _____



Red: _____

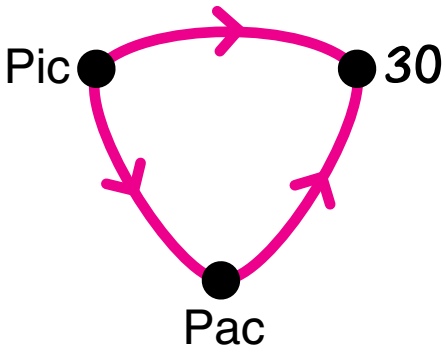


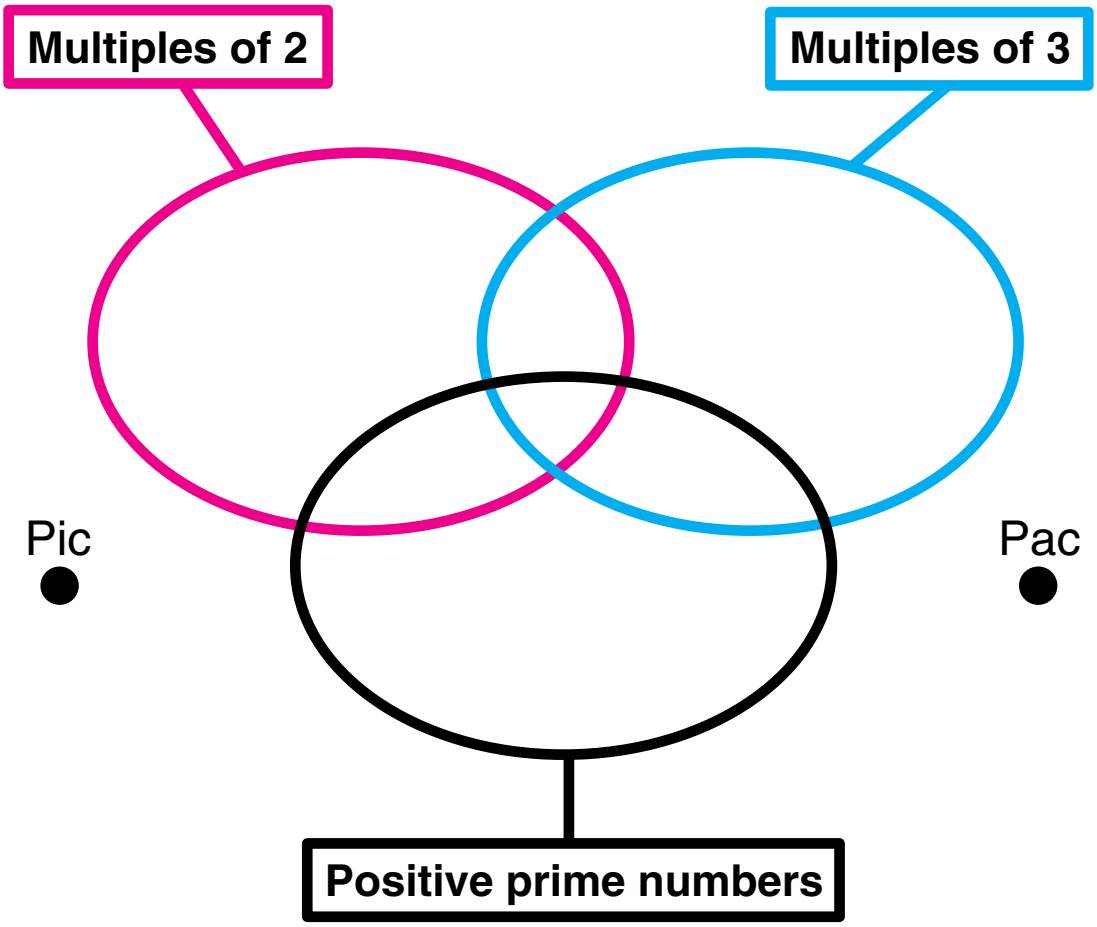
Red: _____



Red: _____

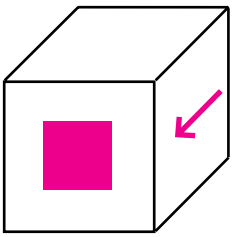
Pic and Pac are secret whole numbers. They are in this arrow picture and in this string picture.

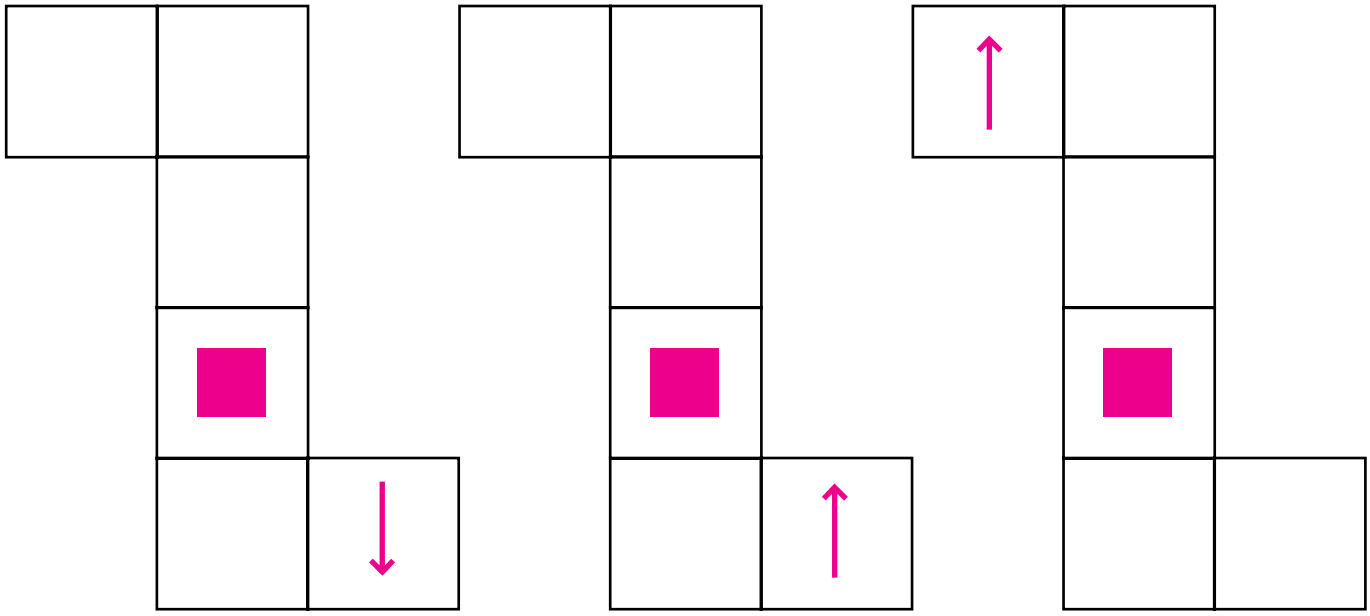




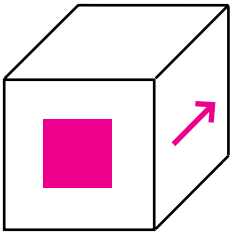
Who is Pic? _____ Who is Pac? _____

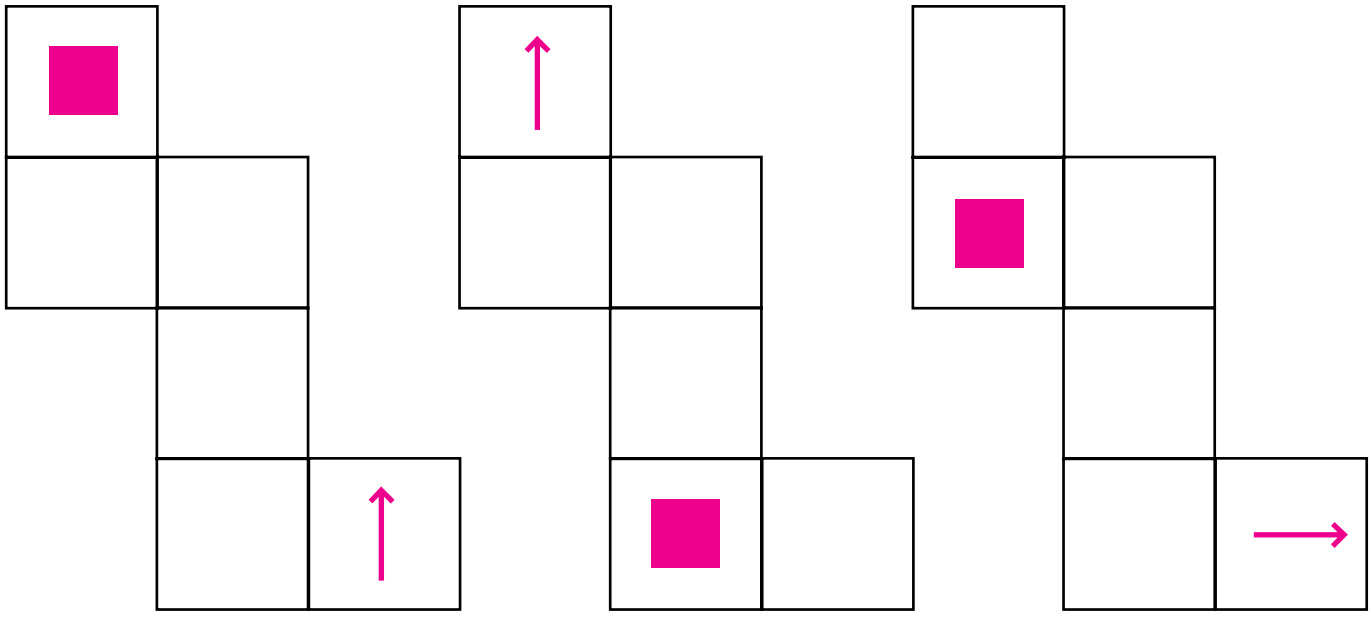
Circle the shape that could be folded into this cube:



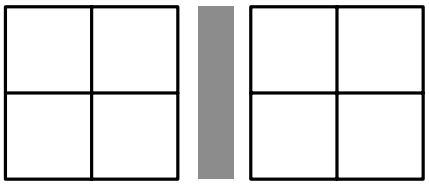


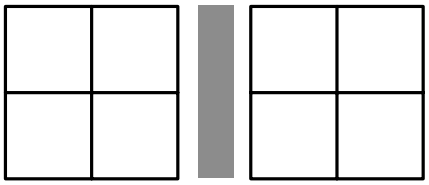
Circle the shape that could be folded into this cube:

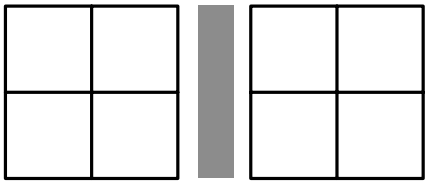


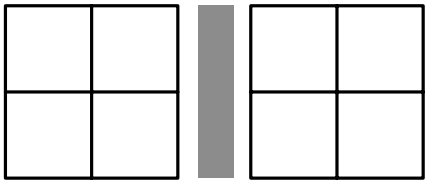


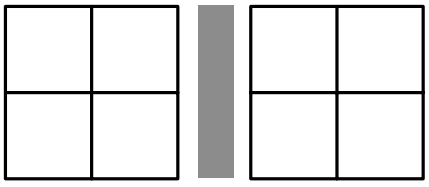
Put each number on the Minicomputer using exactly the checkers to the left of the boards.

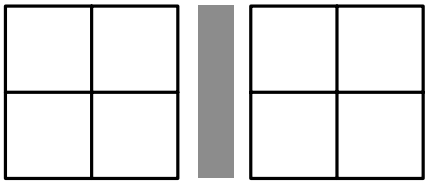
10 5  = 8

5 4  = 10

3 6  = 3

6 7  = 4

9 4  = 5

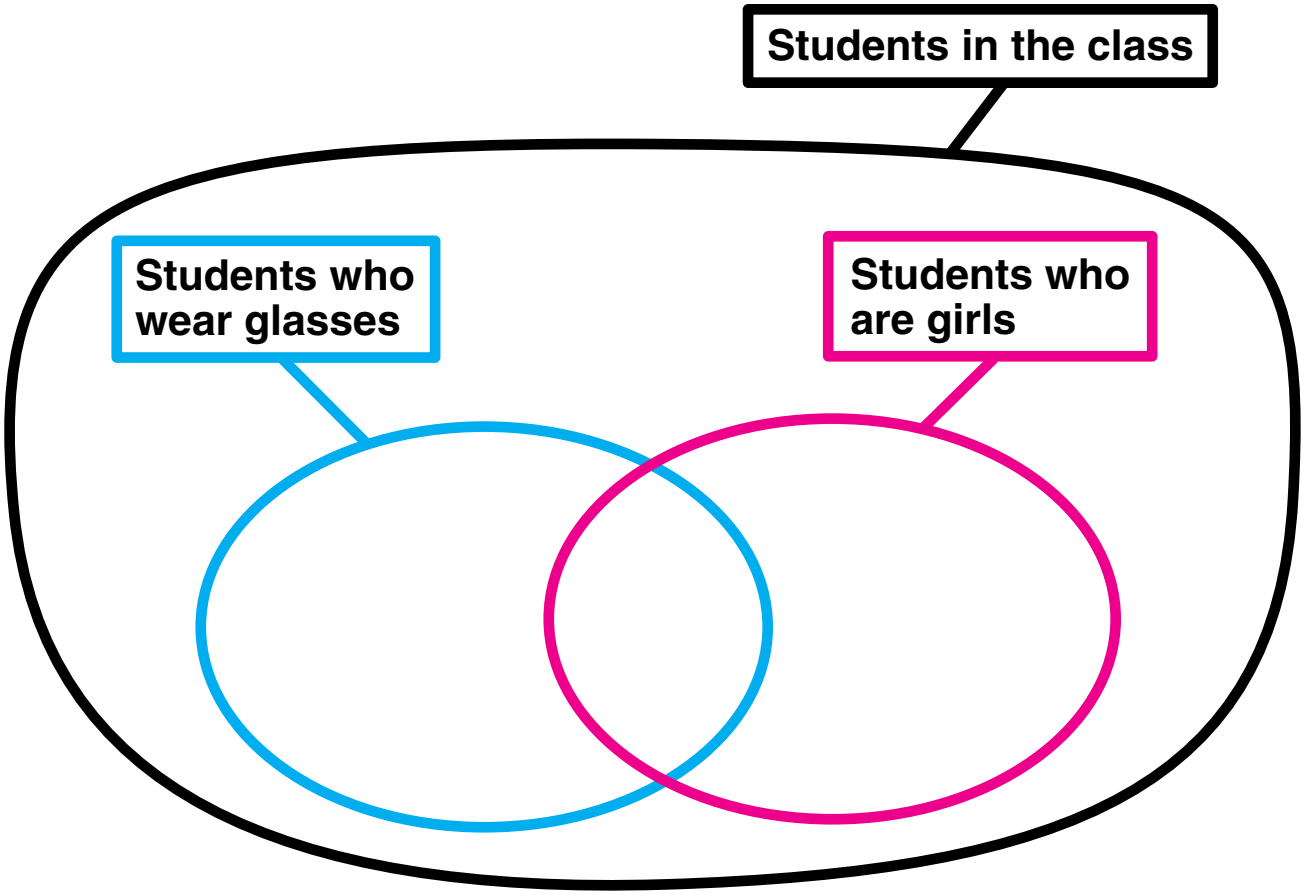
8 8  = 8

There are 22 students in this class.

12 of the students in the class are girls.

One-third of the girls in the class do not wear glasses.

One-half of the students in the class who wear glasses are boys.



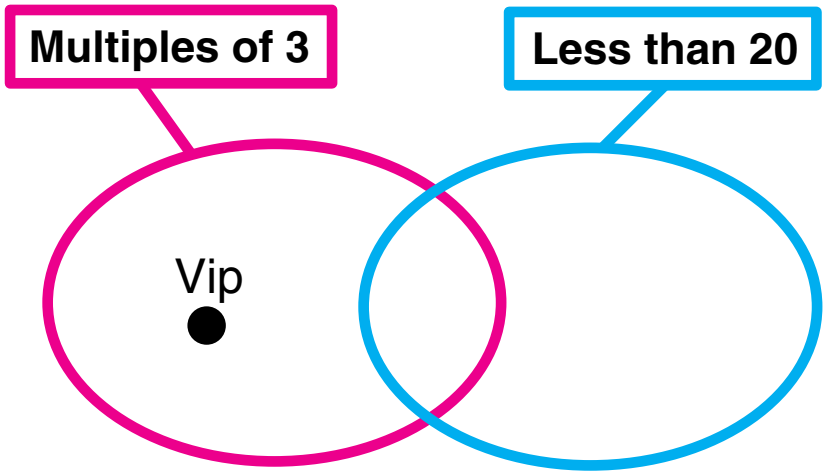
How many of the girls in the class wear glasses? _____

How many of the boys in the class do not wear glasses? _____

How many of the students in the class wear glasses? _____

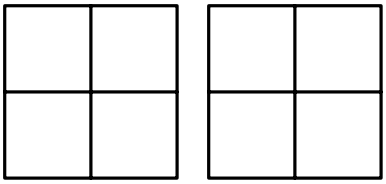
Vip is a secret number.

Clue 1



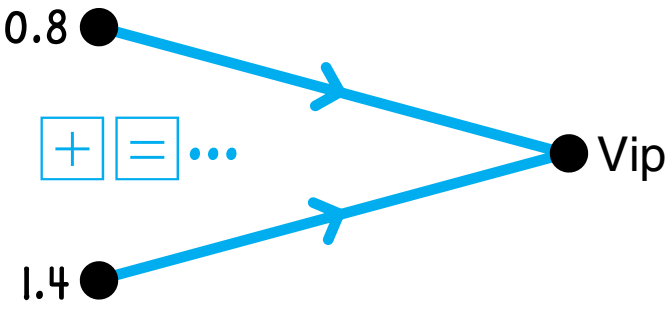
Clue 2

Vip can be put on these Minicomputer boards with exactly two regular checkers.



Vip could be _____, _____, _____, _____, _____, _____, _____, _____, _____, or _____.

Clue 3



Who is Vip? _____

Label the dots.