

Directions: Match the unit from the left column to an answer in the right column.

6 eights

27

7 sixes

48

3 nines

$(4 \times 5) + (4 \times 3)$

8 fours

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

8 eights

$(5 \times 5) + (5 \times 4)$

9 fives

12

6 twos

64

Decompose a Factor

$$\begin{array}{l} 16 \times 3 = \underline{\quad} \\ \swarrow \quad \searrow \\ (10 \times 3) + (6 \times 3) = \underline{\quad} \\ 30 + 18 = \underline{48} \end{array}$$

1. Break apart the larger factor (16) into tens and ones.
2. Multiply each part (10 & 6) by the smaller factor (3).
3. Add the products to find the total.

$$\begin{array}{l} 23 \times 4 = \underline{\quad} \\ \swarrow \quad \searrow \\ (20 \times 4) + (\underline{\quad} \times 4) = \underline{\quad} \\ \underline{\quad} + \underline{\quad} = \underline{\quad} \end{array}$$

$$\begin{array}{l} 28 \times 4 = \underline{\quad} \\ \swarrow \quad \searrow \\ (20 \times \underline{\quad}) + (8 \times \underline{\quad}) = \underline{\quad} \\ \underline{\quad} + \underline{\quad} = \underline{\quad} \end{array}$$

$$\begin{array}{l} 27 \times 3 = \underline{\quad} \\ \swarrow \quad \searrow \\ (\underline{\quad} \times 3) + (7 \times 3) = \underline{\quad} \\ \underline{\quad} + \underline{\quad} = \underline{\quad} \end{array}$$

$$\begin{array}{l} 34 \times 4 = \underline{\quad} \\ \swarrow \quad \searrow \\ (\underline{\quad} \times \underline{\quad}) + (\underline{\quad} \times \underline{\quad}) = \underline{\quad} \\ \underline{\quad} + \underline{\quad} = \underline{\quad} \end{array}$$

$$\begin{array}{l} 17 \times 5 = \underline{\quad} \\ \swarrow \quad \searrow \\ (\underline{\quad} \times 5) + (\underline{\quad} \times 5) = \underline{\quad} \\ \underline{\quad} + \underline{\quad} = \underline{\quad} \end{array}$$

$$\begin{array}{l} 18 \times 5 = \underline{\quad} \\ \swarrow \quad \searrow \\ (\underline{\quad} \times \underline{\quad}) + (\underline{\quad} \times \underline{\quad}) = \underline{\quad} \\ \underline{\quad} + \underline{\quad} = \underline{\quad} \end{array}$$

Decompose a Factor

$$\begin{array}{c} 16 \times 3 = \underline{\quad} \\ \swarrow \quad \searrow \\ (10 \times 3) + (6 \times 3) = \underline{\quad} \\ 30 + 18 = \underline{48} \end{array}$$

1. Break apart the larger factor (16) into tens and ones.
2. Multiply each part (10 & 6) by the smaller factor (3).
3. Add the products to find the total.

$$\begin{array}{c} 47 \times 4 = \underline{\quad} \\ \swarrow \quad \searrow \\ (40 \times 4) + (\underline{\quad} \times 4) = \underline{\quad} \\ \underline{\quad} + \underline{\quad} = \underline{\quad} \end{array}$$

$$\begin{array}{c} 36 \times 3 = \underline{\quad} \\ \swarrow \quad \searrow \\ (30 \times \underline{\quad}) + (6 \times \underline{\quad}) = \underline{\quad} \\ \underline{\quad} + \underline{\quad} = \underline{\quad} \end{array}$$

$$\begin{array}{c} 64 \times 3 = \underline{\quad} \\ \swarrow \quad \searrow \\ (\underline{\quad} \times 3) + (4 \times 3) = \underline{\quad} \\ \underline{\quad} + \underline{\quad} = \underline{\quad} \end{array}$$

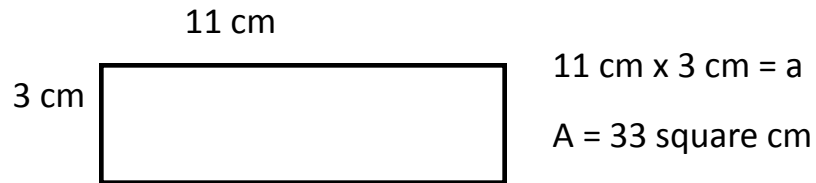
$$\begin{array}{c} 47 \times 4 = \underline{\quad} \\ \swarrow \quad \searrow \\ (\underline{\quad} \times \underline{\quad}) + (\underline{\quad} \times \underline{\quad}) = \underline{\quad} \\ \underline{\quad} + \underline{\quad} = \underline{\quad} \end{array}$$

$$\begin{array}{c} 14 \times 6 = \underline{\quad} \\ \swarrow \quad \searrow \\ (\underline{\quad} \times 6) + (\underline{\quad} \times 6) = \underline{\quad} \\ \underline{\quad} + \underline{\quad} = \underline{\quad} \end{array}$$

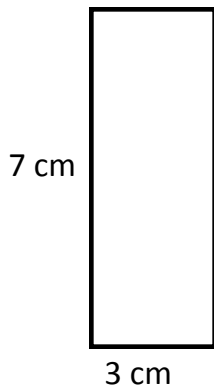
$$\begin{array}{c} 13 \times 8 = \underline{\quad} \\ \swarrow \quad \searrow \\ (\underline{\quad} \times \underline{\quad}) + (\underline{\quad} \times \underline{\quad}) = \underline{\quad} \\ \underline{\quad} + \underline{\quad} = \underline{\quad} \end{array}$$

Area of a Rectangle

To determine the area of a rectangle multiply the length by the width.

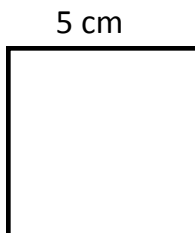


Shape A



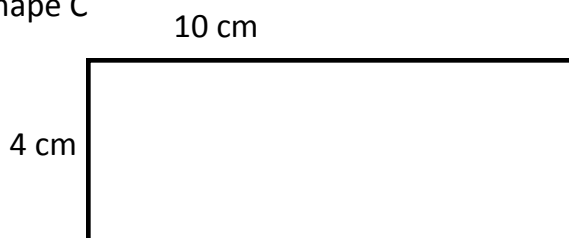
$a = \underline{\hspace{2cm}}$

Shape B



$a = \underline{\hspace{2cm}}$

Shape C



$a = \underline{\hspace{2cm}}$

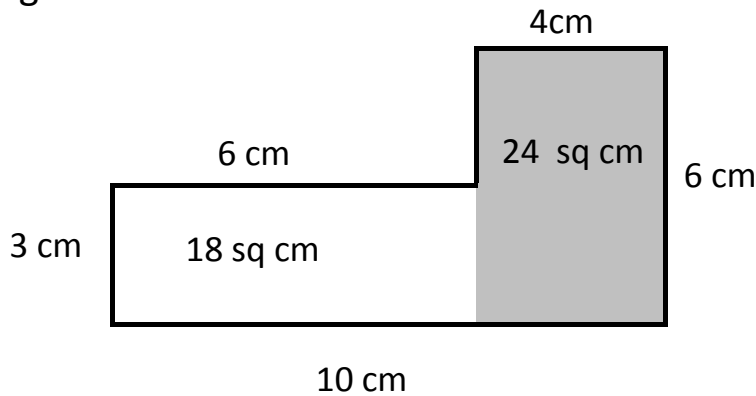
1. What is the area of Shape A and Shape B combined?

2. What is the area of all three shapes?

3. How much larger is the area of Shapes A & B combined than Shape C?

Area of a Rectangle

You can find the area of an irregular object by decomposing it into smaller rectangles.



$$4 \text{ cm} \times 6 \text{ cm} = a$$

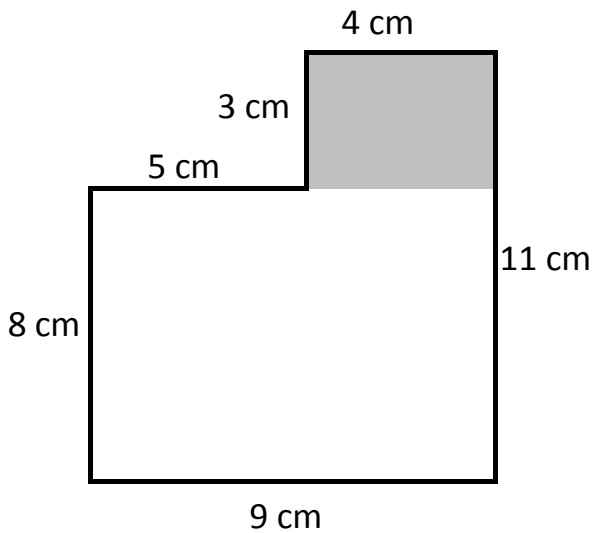
$$a = 24 \text{ sq cm}$$

$$3 \text{ cm} \times 6 \text{ cm} = a$$

$$a = 18 \text{ sq cm}$$

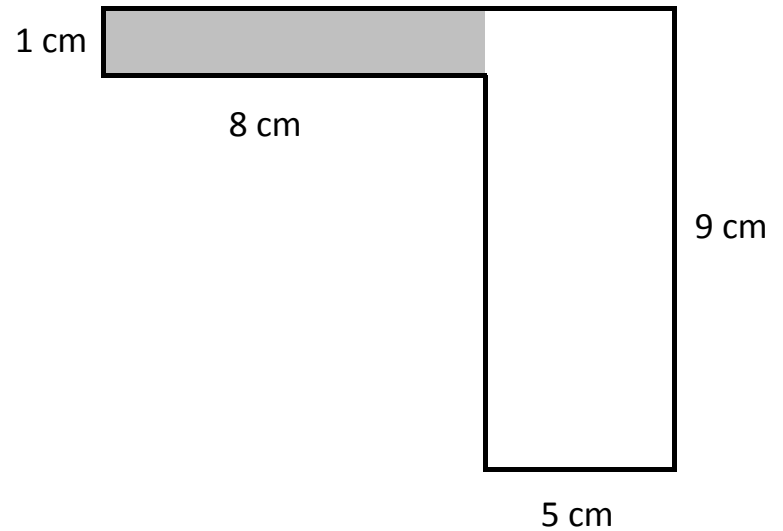
$$18 \text{ sq cm} + 24 \text{ sq cm} = 42 \text{ sq cm}$$

Shape A



a = _____

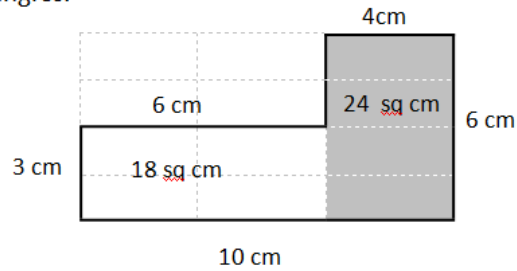
Shape B



a = _____

Area of a Rectangle

You can find the area of an irregular object by decomposing it into smaller rectangles.



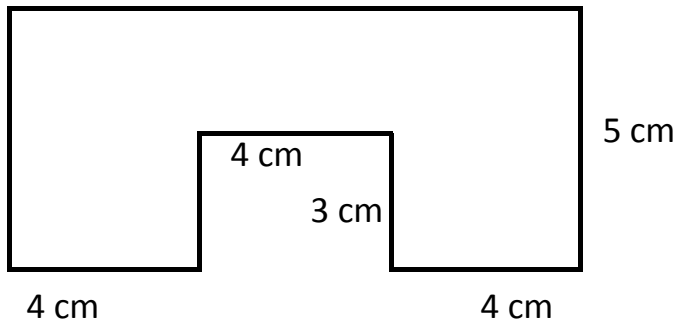
$$4 \text{ cm} \times 6 \text{ cm} = a$$

$$a = 24 \text{ sq cm}$$

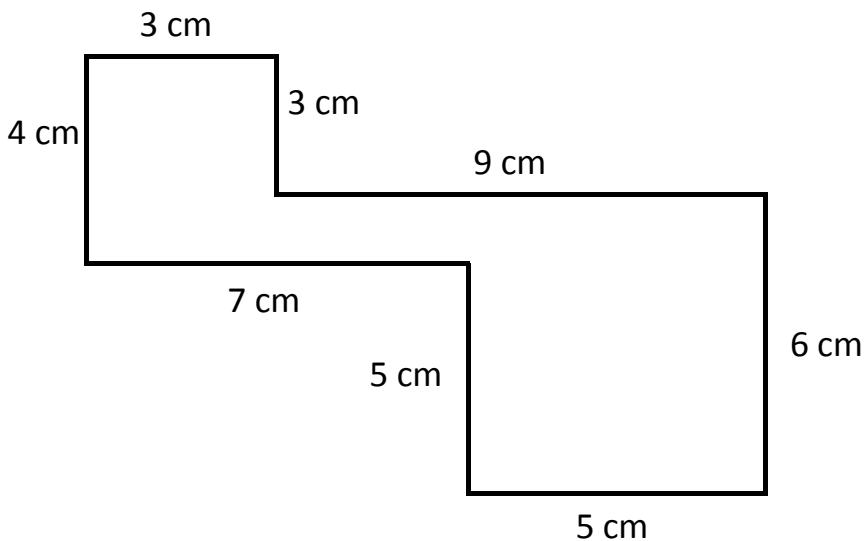
$$3 \text{ cm} \times 6 \text{ cm} = a$$

$$a = 18 \text{ sq cm}$$

$$18 \text{ sq cm} + 24 \text{ sq cm} = 42 \text{ sq cm}$$



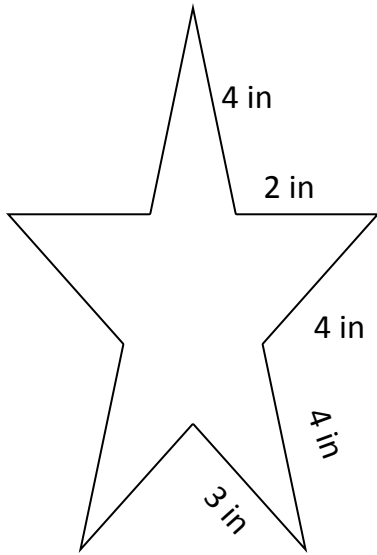
$$a = \underline{\hspace{2cm}}$$



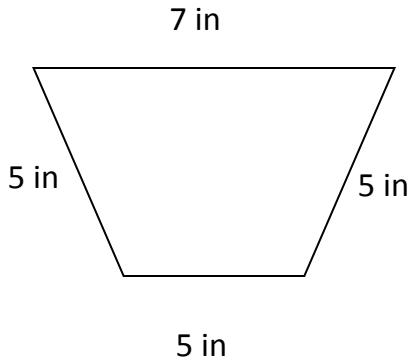
$$a = \underline{\hspace{2cm}}$$

Perimeter of a Polygon

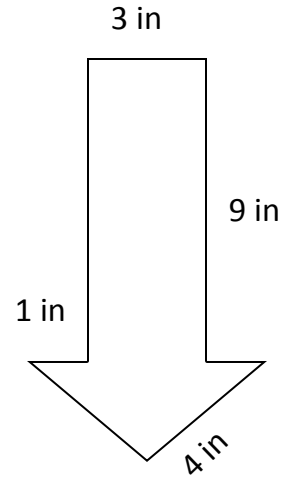
The perimeter of a polygon can be calculated by adding together the length of all sides.



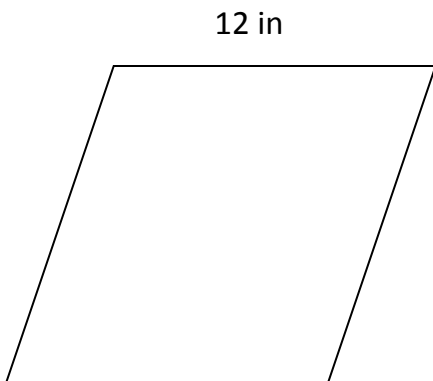
P = _____



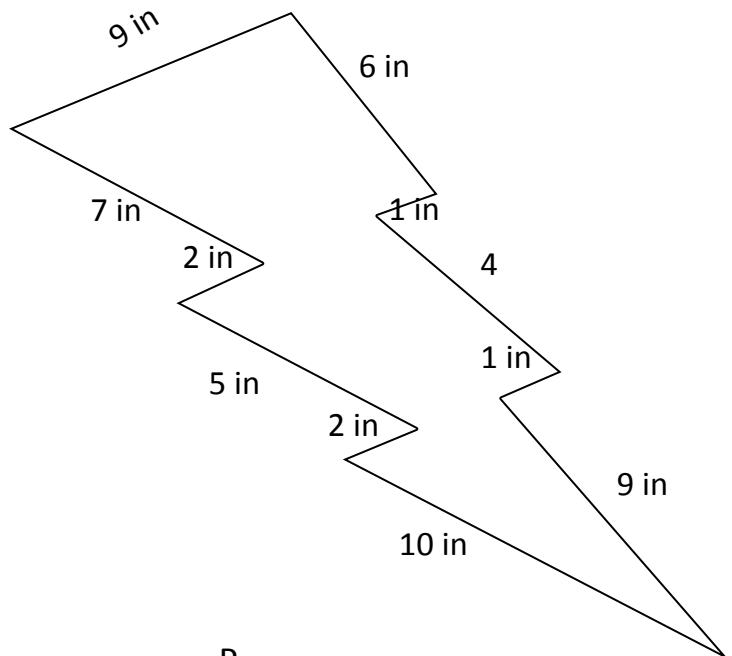
P = _____



P = _____



P = _____



P = _____

Input / Output

Directions: Observe how the numbers change from the input column to the output column to identify the rule. Complete the tables.

Input	Output
5	25
	15
9	
7	35
	50

Rule: Multiply by 5

Input	Output
3	9
9	
7	21
	30
	15

Rule: _____

Input	Output
7	
49	7
35	
70	10
	6

Rule: _____

Input	Output
	140
2	4
50	100
65	
	180

Rule: _____

Input	Output
36	6
	8
42	
12	2
54	

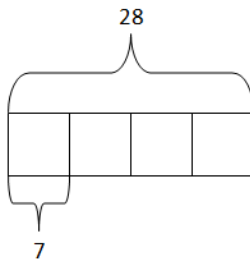
Rule: _____

Input	Output
8	
	28
12	
5	20
1	4

Rule: _____

Tape Diagrams

Directions: Complete the missing information for each tape diagram and write 4 related facts.



Related Facts

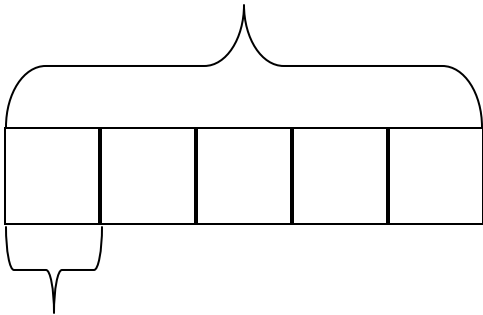
$$4 \times 7 = 28$$

$$7 \times 4 = 28$$

$$28 \div 4 = 7$$

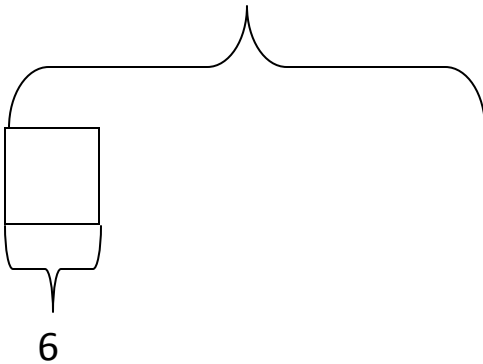
$$28 \div 7 = 4$$

45

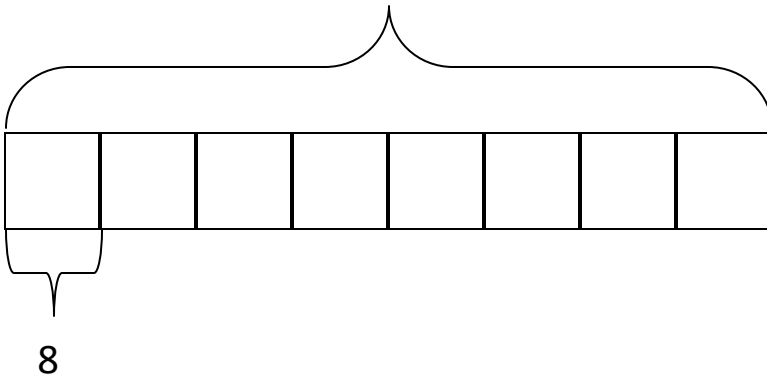


Related Facts

42



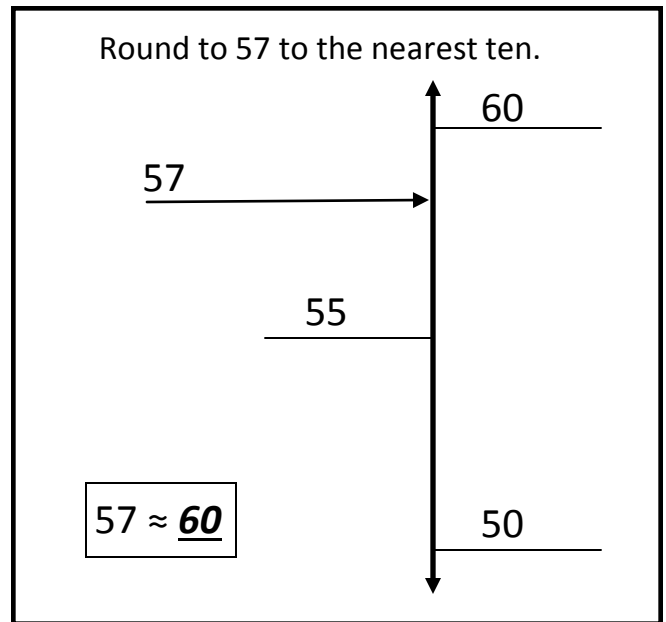
Related Facts



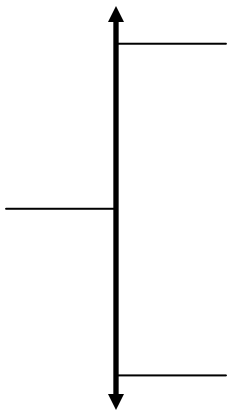
Related Facts

Rounding

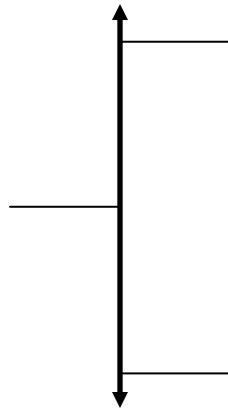
To round on a vertical number label the you round up to (60), round down to (50), and the midpoint (55). Place the number you are rounding (57) on the number line and determine which number it is closer to.



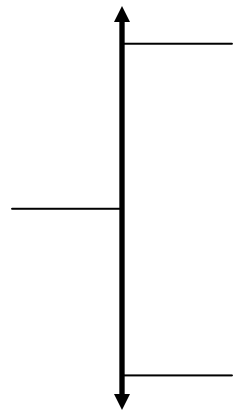
Directions: Round to 57 to the nearest ten



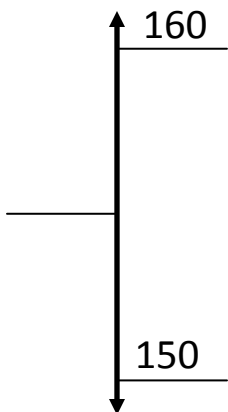
$38 \approx \underline{\quad}$



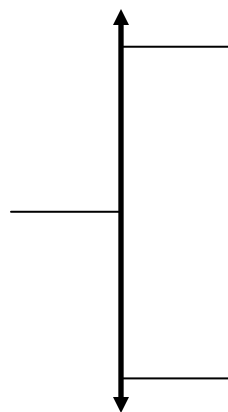
$43 \approx \underline{\quad}$



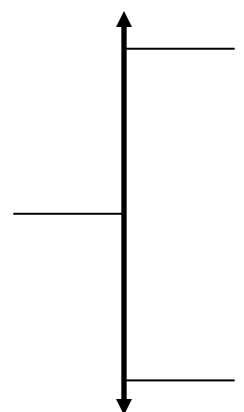
$74 \approx \underline{\quad}$



$157 \approx \underline{\quad}$



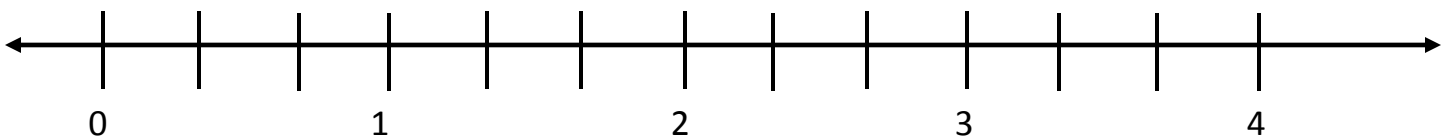
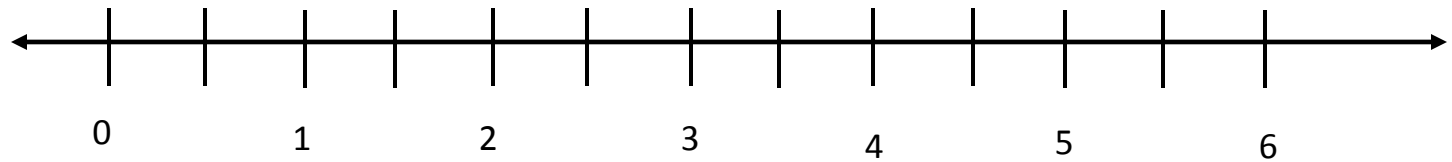
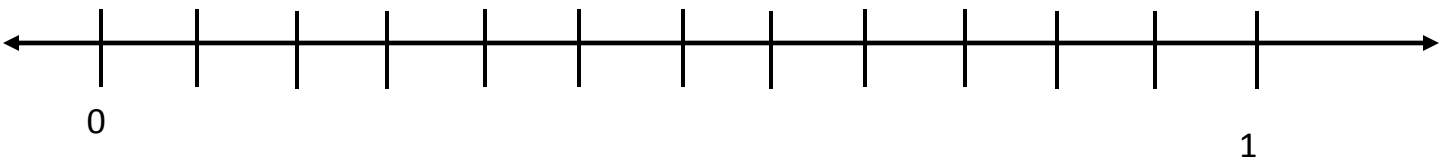
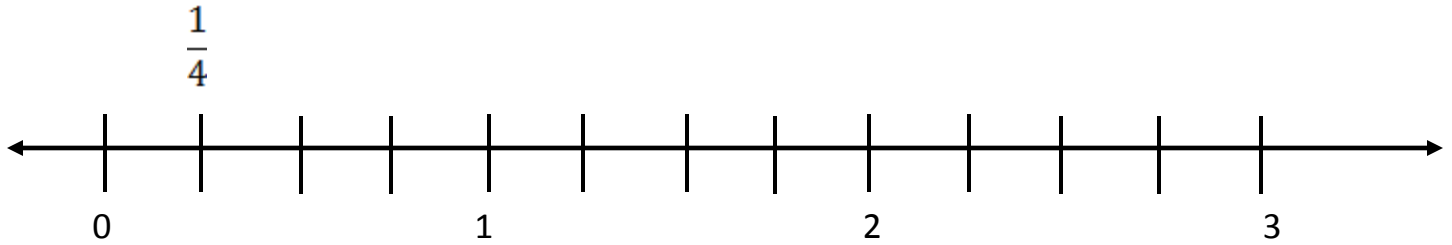
$257 \approx \underline{\quad}$



$698 \approx \underline{\quad}$

Fractions on a Number Line

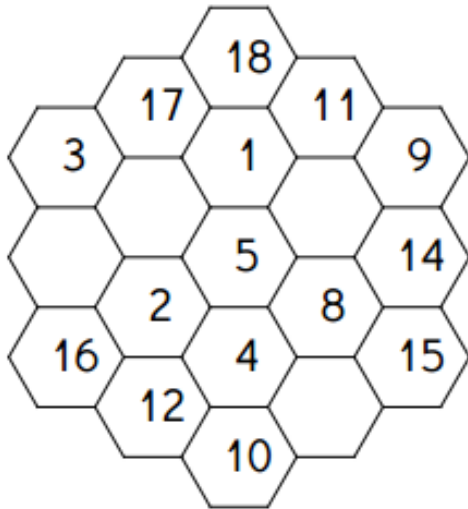
Directions: Label the ticks on the number line with the appropriate fraction.



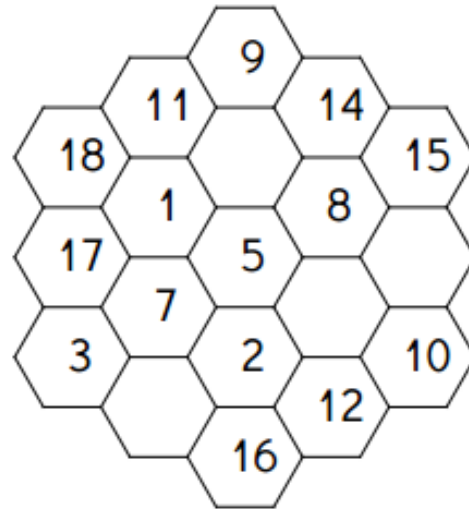
Create a number line using a unit fraction of your choice.



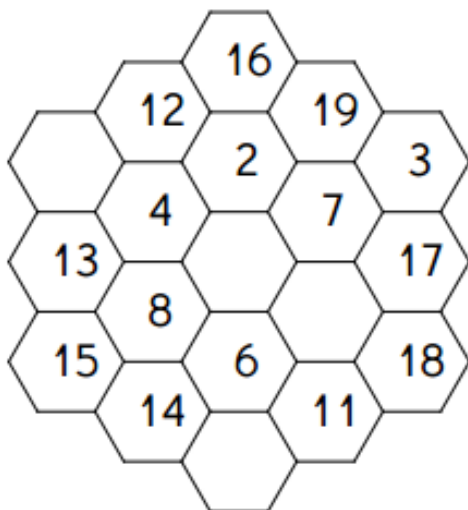
Hexagon Puzzles



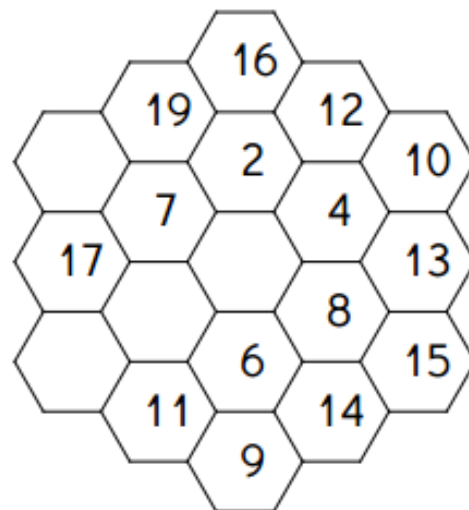
Write the numbers 1 to 19,
so that each row and diagonal
has the same sum



Write the numbers 1 to 19,
so that each row and diagonal
has the same sum



Write the numbers 1 to 19,
so that each row and diagonal
has the same sum



Write the numbers 1 to 19,
so that each row and diagonal
has the same sum