Lesson 6 HW

1 Solve the 2-step problems by identifying units' values. Write each step separately, and describe its meaning (see classwork sample).

A. Granny Rhinoceros baked cookies and distributed them evenly among plates. On 3 plates, there are 18 cookies in total. How many cookies are there on 7 plates?

1. _____

2. _____

B. Grapes are packed in identical boxes. 8 boxes contain 56 kg of grapes. How many kilograms of grapes are in 5 boxes?

1. _____

2. _____

C. A snail eats 63 grams of leaves in 9 days. How many grams of leaves does the snail eat in a week?

1. _____

2. _____

D. There are 35 liters of juice in 5 identical cans. How many liters of juice are there in 9 such cans?

1. _____

2. _____

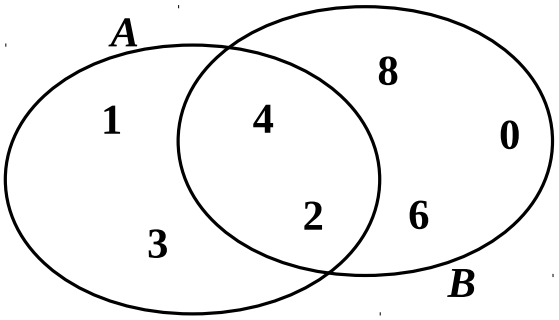
2 Solve equations **in your notebook,** copy your answers here. Make diagrams!

$203 - x = 49$	$y + 72 = 841$	$42 : w = 6$
x = _____	y = _____	w = _____

3 ***C*** is a set of the school's athletes. ***F*** is a set of the school's soccer players. ***B*** is the set of the school's goal keepers in soccer teams. Draw a Venn Diagram for the sets ***B***, ***C***, and ***F***.

P is a set of animals. ***Q*** is a set of predators. ***R*** is a set of birds. Draw a Venn Diagram for the sets ***P***, ***Q***, and ***R***.

4 Use {} to list the elements of sets ***A***, ***B***, and their intersection. List elements in increasing order.



A = _____

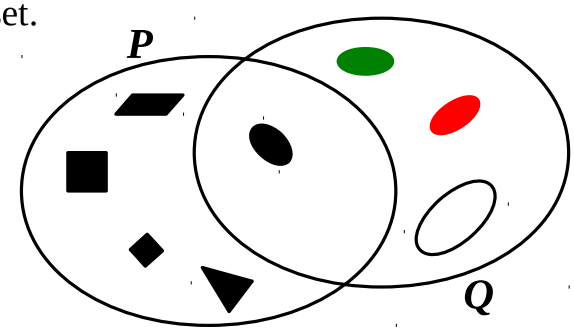
B = _____

A ∩ ***B*** = _____

Fill in the blanks with the symbols ∈ or ∉:

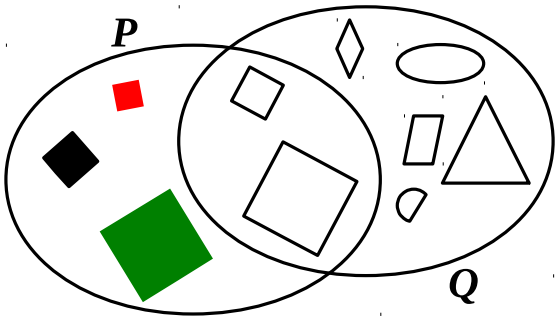
1 ***A***	4 ***B***	8 ***A***	0 ***B***
4 ***A***	8 ***B***	***3*** ***B***	6 ***B***

5 List the properties that the elements in the intersection of sets ***P*** and ***Q*** share with each set.



1._____

2. _____

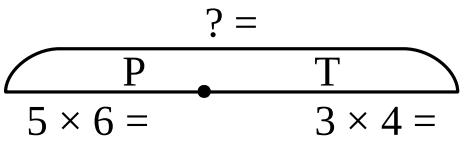


1._____

2._____

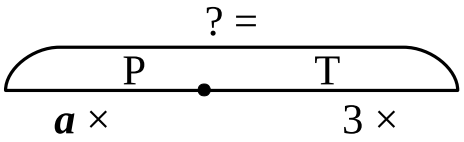
6 Complete the diagrams to help you solve the problems:

A. There are 5 potatoes in each of 6 baskets and 3 tomatoes in each of 4 bags. How many vegetables are there total?



_____

B. There are ***a*** potatoes in each of ***b*** baskets and 3 tomatoes in each of ***w*** bags. How many vegetables are there in total?



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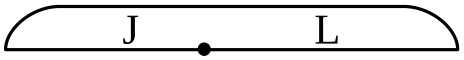
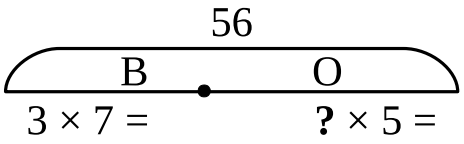
C. Jake types ***k*** pages per hour, Lisa types ***m*** pages. How many pages did they type on Friday if Jake worked 5 hours and Lisa worked ***q*** hours?



_____

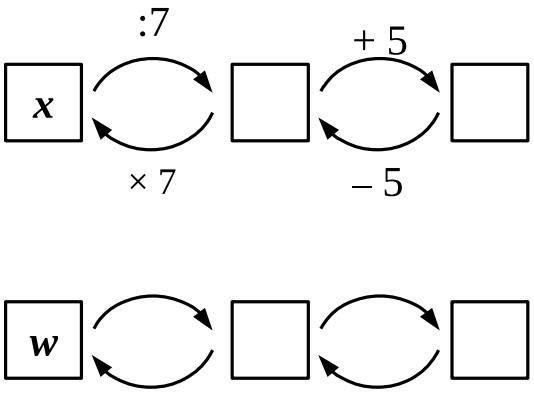
D.* There are 56 fruits on the table. There are 3 bananas on each of 7 plates. The rest are oranges distributed in 5 bowls. How many oranges are in each bowl?



_____

7 Use analysis of operations to solve the equations.

x	:	7	+	5	=	1	1		
x	:	7	=	1	1	–	5		
x	:	7	=						
x	=		×	7					
x	=								
									✔



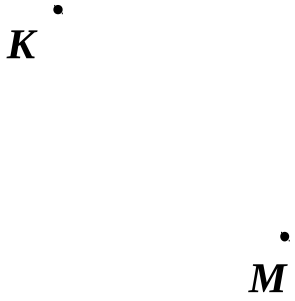
(***w***	+	5)	–	3	=	4			
w	+	5	=						
									✔

8 Use a compass to find set of all points that are …

… 5 cm away from point ***K***

and

… 4 cm away from point ***M***.



How many points did you find? ___

9 Use a compass to find ***all*** points on curve ***p*** located 3 cm away from point ***X***.

How many points did you find? ___

How do we call the set of all points located 4 cm away from point ***X***?

_____

10 Find set of all points that are …

… 2 cm away from point ***A***

and

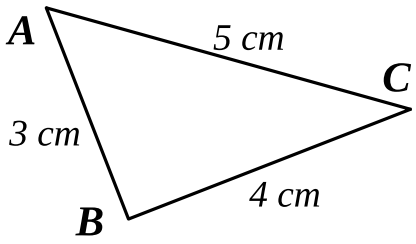
… 2 cm away from point ***B***.

How many points did you find? ___

What do you think is the reason for that? _____

_____

11 The dimensions of the triangle △***ABC*** are labeled on the drawing. List two properties of each of the points A, B, and C in terms of distances.



A:	***B***:	***C***:
1. $\|AB\|$ = _____	1. _____	1. _____
2. _____	2. _____	2. _____

* Check ✔ the TRUE statements; cross mark ✗ the FALSE statements.

☐ $A \in \text{Circ}(B, 3\text{ cm})$ ☐ $A \in \text{Circ}(C, 3\text{ cm})$

☐ $A \in \text{Circ}(A, 3\text{ cm})$ ☐ $A \notin \text{Circ}(B, 4\text{ cm})$

☐ $B \in \text{Circ}(A, 3\text{ cm}) \cap \text{Circ}(C, 4\text{ cm})$

☐ $A \notin \text{Circ}(B, 3\text{ cm}) \cap \text{Circ}(C, 5\text{ cm})$

☐ $C \notin \text{Circ}(A, 3\text{ cm}) \cap \text{Circ}(C, 5\text{ cm})$

Take your time

Use your imagination

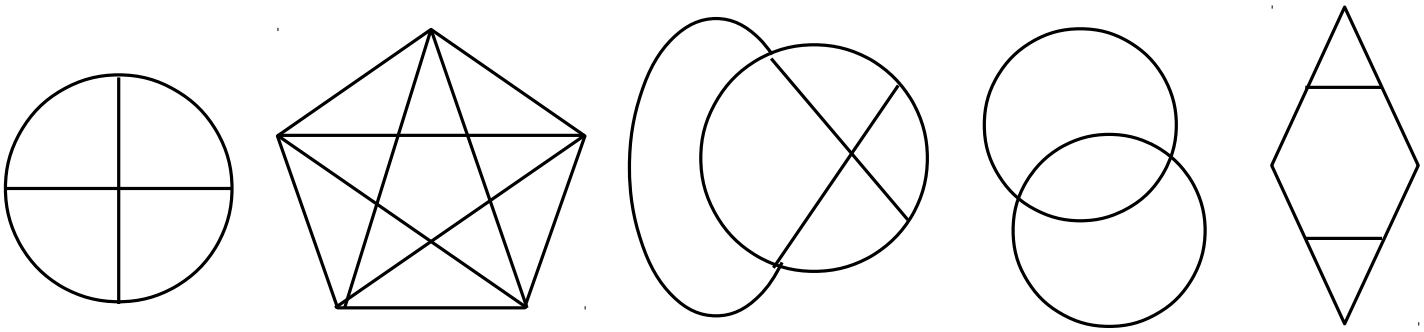
You may use a compass,

but try not to

☐ $AB \cap BC = \varnothing$ ☐ $AC \cap BC \neq \varnothing$ ☐ $AB \cap AC \neq \varnothing$

☐ $B \in \text{Circ}(A, 3\text{ cm}) \cap BC$ ☐ $B \in \text{Circ}(A, 5\text{ cm}) \cap BC$

12 Try to trace each shape without lifting the pencil or tracing the same edge twice. For each picture state if it is possible.

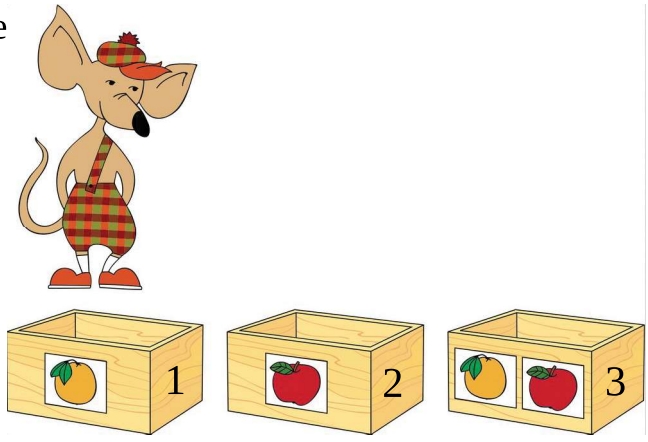


_____ _____ _____ _____ _____

13 Foxy Tail put apples and oranges in three boxes and labeled these boxes. Of course, he placed each label onto the wrong box.

You are allowed to pick just one fruit from one box only to identify the content of each box.

Which box would you choose and why?



I choose box # ____ because _____

_____

14 Who is the fastest: a deer, a fox, a snail, a turtle, and a pig? _____

The turtle is faster than the fox

The pig is slower than the fox

The pig is slower than the snail

The deer is faster than the turtle

The snail is faster than the deer

slow *fast*

Is the dear faster than the fox? _____