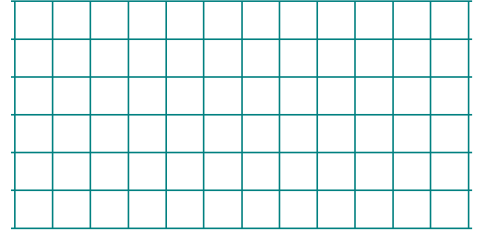# Lesson 14 HW

1 Write the expressions to solve the word problems. Make any necessary diagrams.

There are *c* kg of apples in each box. There are 4 boxes of green apples and 5 boxes of red apples. How much do the green and red apples weight altogether?

_____

Mr. Frog jumps 50 cm at a time. He is sitting at the mark of 20 cm, and jumps in the "increasing" direction. Where will he land after the 5th jumps?

_____
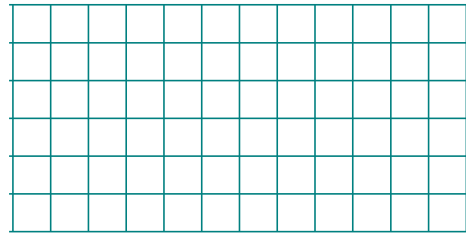
Rex eats 2 sausages every day. Conny eats 3 sausages every day. How many days will 35 sausages last for the two of them?

_____
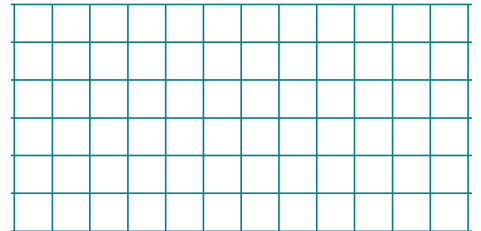
A master produces 7 swords a week. His apprentice produces *x* swords less than the master. How many swords will they both make in 5 weeks?

_____
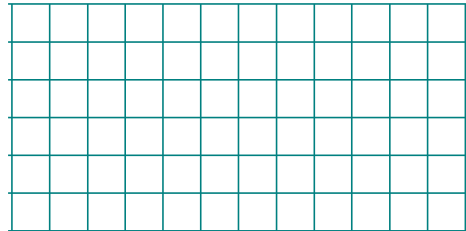
There are 96 vegetables on a table. Tomatoes are on 6 plates, 3 tomatoes per plate. Carrots are in 10 boxes, *x* carrots per box. Avocados are in 4 identical bags. How many avocados are in each bag?

_____
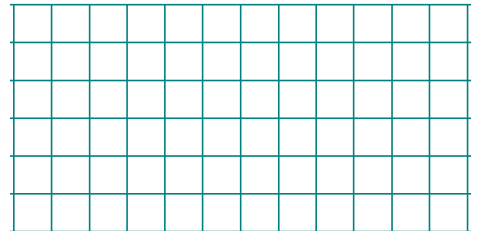
2 Find the best replacement to simplify the equation:

$63 \div (w - 5) = 7$ ⟶ *x* = ☐

3 Calculate in your notebook and copy your answer here:

$319 \times 4 =$ _____ $715 \div 5 =$ _____ $284 \times 3 =$ _____

$921 \div 3 =$ _____ $427 \times 7 =$ _____ $612 \div 9 =$ _____

$780 \times 90 =$ _____ $318 \div 6 =$ _____ $172 \times 7 =$ _____

4 Make equations based on the drawings:

$$3x + 2$$

$$x \qquad x + 4$$

_____

$$18$$

$$4x \qquad x + 3$$

_____

$$91$$

$$w - 5 \qquad w + 4$$

_____

$$x + 12$$

| 126 | 7 |

_____
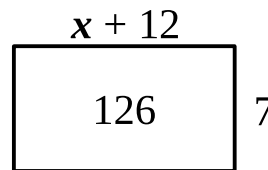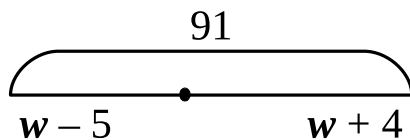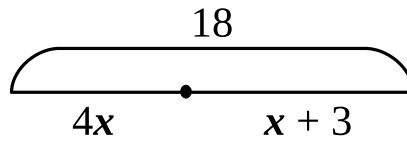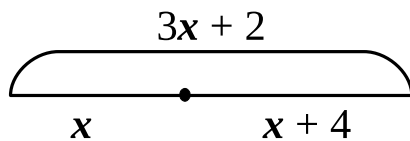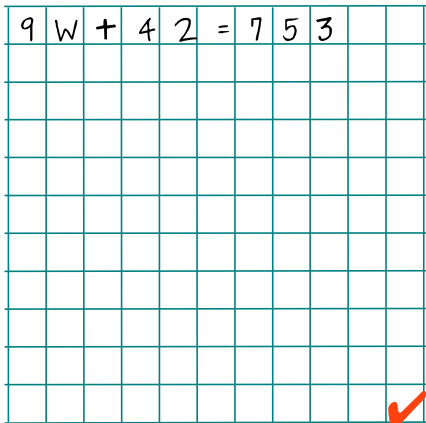
5 Sort the numbers from 0 to 24 in the Venn Diagram.
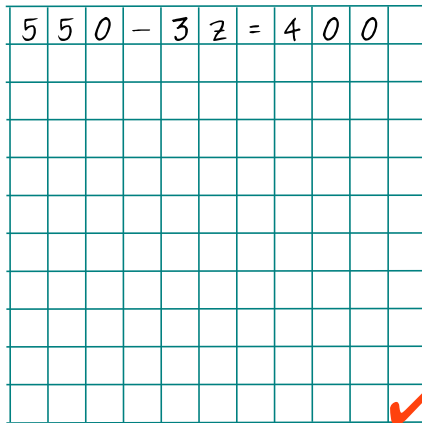
	Multiple of 3	Not a multiple of 3
Multiple of 4		
Not a multiple of 4		

$0 \leq$ number ≤ 24

Multiples of 4

Multiples of 3
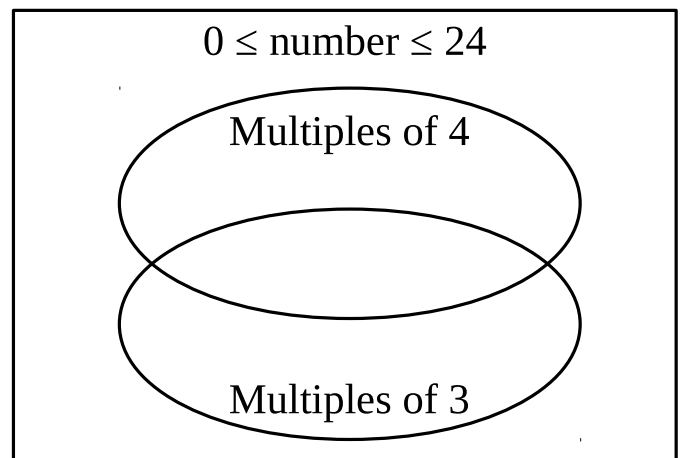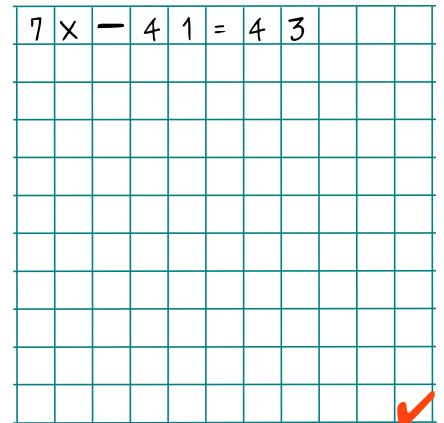
6 Solve the equations and check your answer:

9	w	+	4	2	=	7	5	3
5	5	0	−	3	z	=	4	0	0
7	x	−	4	1	=	4	3

7 Use a compass and a straight edge to find the middle of [**AB**]. Label it **K**. Base your algorithm on the *properties of rhombuses*. Write it down.
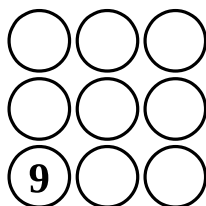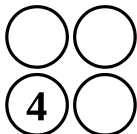
1. _____

_____

_____

_____

_____

_____

_____

A

B
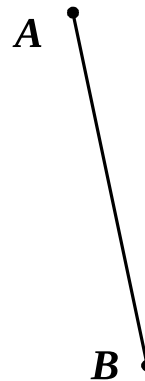
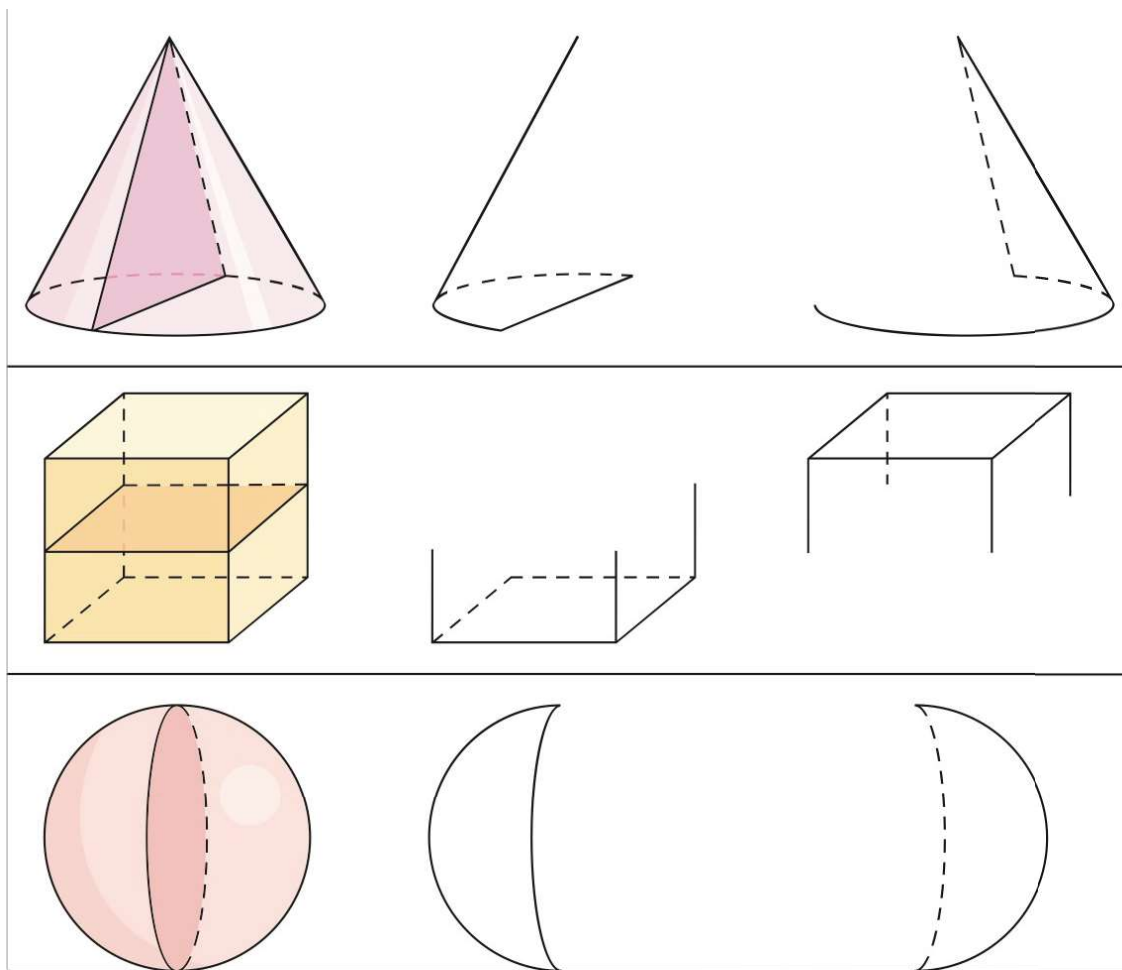**8** Look at the so-called "square" numbers. Construct the next two.

1   4   9

9 Check ✔ the existing triangles. Cross ✗ the triangles that do not exist. Use your knowledge of the algorithm for finding the third point of a triangle.

|	$|AB|$ = …	$|BC|$ = …	$|AC|$ = …
	5 cm	7 cm	9 cm
	3 cm	2 cm	10 cm
	6 cm	7 cm	11 cm
	3 cm	4 cm	9 cm

Use a compass and a straight edge on a scrap paper to check your answers.

10

Imagine each shape was cut in two parts. Finish the drawings of each part.

11 Jenny thought of a number, divided it by 7, then multiplied by 100. Later she subtracted 654 from the result and finally added 108 to obtain 8454. What number did she initially think of?

x ◯ ▢ ◯ ▢ ◯ ▢ ◯ ▢ ◯ ▢ ◯ ▢ ◯ ▢

$x =$ _____
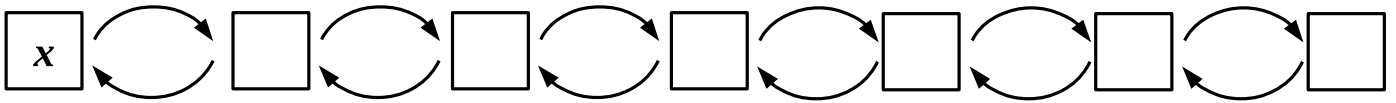
* A peasant came to a market to sell apples. He sold a half of his apples and another apple to a customer. Then he sold a half of remaining apples and another apple to another customer. Finally he sold the last apple to the third customer. How many apples did the peasant bring to the market?

x ◯ ▢ ◯ ▢ ◯ ▢ ◯ ▢ ◯ ▢ ◯ ▢ ◯ ▢

$x =$ _____
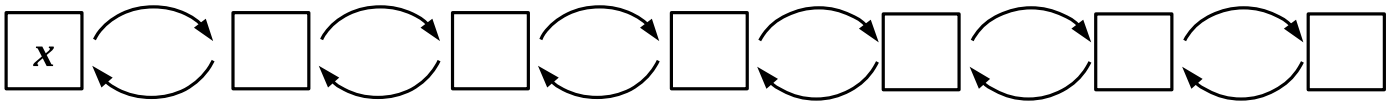
12 In the picture, 18 sticks make up 6 little squares. Note that 4 of these little squares make up a large square. Take away 2 matches so that only 4 squares are left. Try to find both solutions.
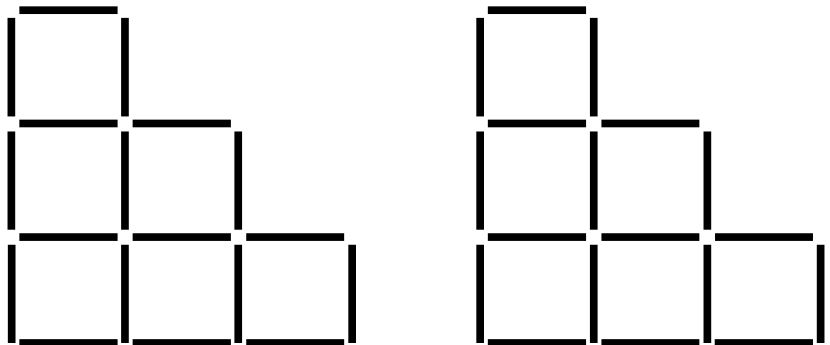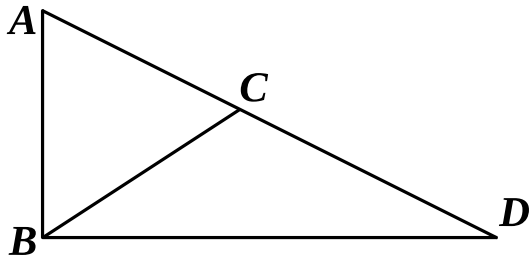
13 Find the missing digits:

$$
\begin{array}{r}
7 \quad 5\,9 \quad 1\,4 \\
+\ 3\,2 \quad\ \ 5\,0 \quad\quad \\
\hline
5\,4 \quad 4\,2\,1
\end{array}
\qquad
\begin{array}{r}
6 \quad 7 \quad 2\,8\,3 \\
+\quad\ 5\,3\,2 \quad\ 2 \\
\hline
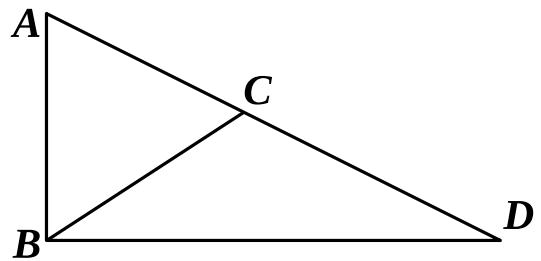8\,6 \quad 9\,6 \quad 7
\end{array}
$$

14 Use a blue pencil to color in …
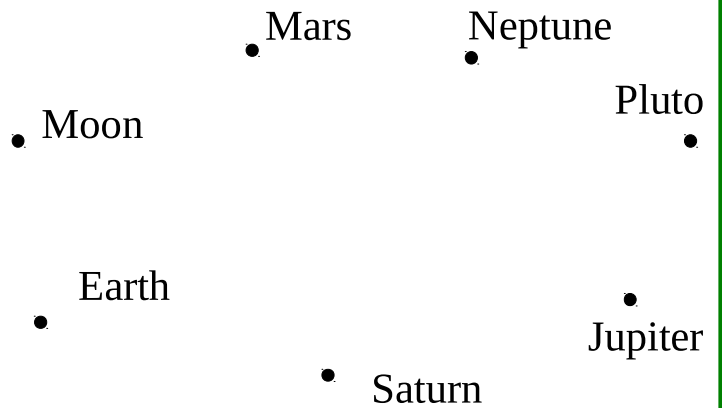
… $\triangle ABC \cap \triangle ABD$

… $\triangle ABC \cup \triangle ABD$

15 Here is the list of commercial interplanetary flight services: Mars – Moon, Saturn – Earth, Neptune – Jupiter, Moon – Earth, Pluto – Jupiter, Saturn – Mars, Neptune – Pluto, Jupiter – Mars. Each service is available in both directions.

Complete the graph to find out whether it is possible to travel from Pluto to the Moon.

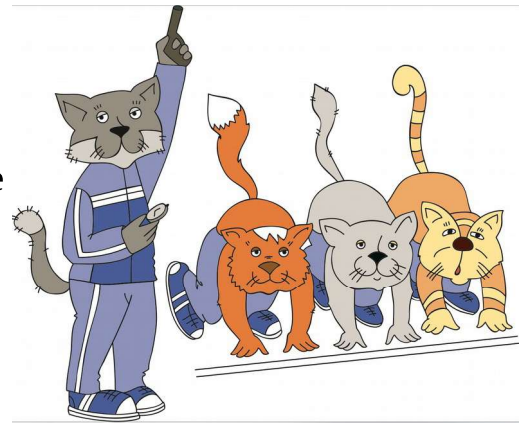*You may want to number the flights to avoid missing any flight on the graph.*

Mars   Neptune

Pluto

Moon

Earth

Jupiter

Saturn

16 There was an annual race on the Cat Island. After the race was over, our mice were discussing the results.

PY: *Mr. Red Jr. got first place, and Mr. White Jr. got second place.*

JTM: *Mr. Brown Jr. was first, Mr. Red Jr. was second.*

LJ: *Only one part of each of your statement is true.*

Which cat got which place?

	Mr. ⬜	Mr. 🟥	Mr. 🟫
PY			
JTM			

Place: _____   _____   _____