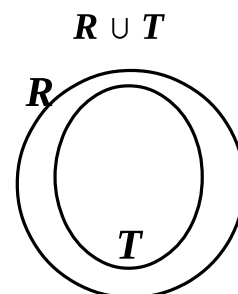# Lesson 10 HW

1 Shade the following Venn Diagrams:

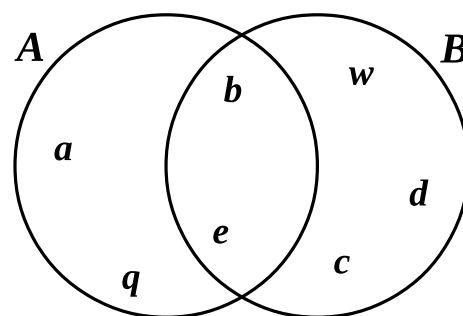$X \cap W$ $W \cup W$ $R \cap T$ $R \cup T$

W   X   W   X   R   T   R   T
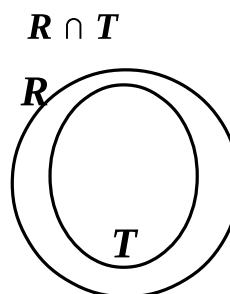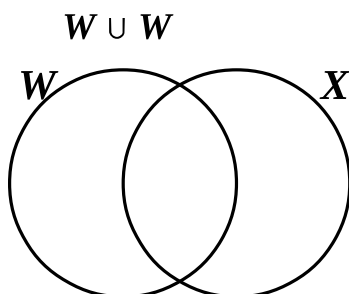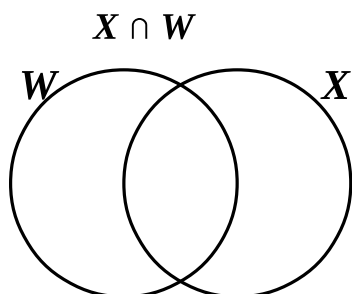
2 List the elements in the following sets:

A = _____

B = _____

A ∩ *B* = _____

A ∪ *B* = _____

A   B

a   b   w   d   e   c   q

3 Look at the diagram of the students' music skills:

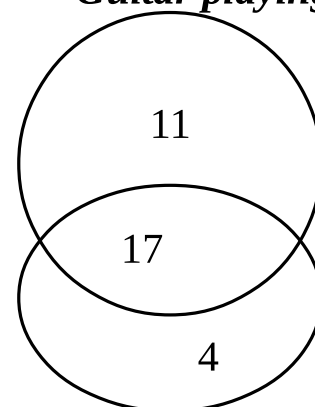How many students play guitar? _____

How many students sing? _____

How many students both play guitar AND sing _____

How many students play guitar OR sing _____

How many students play guitar only? _____

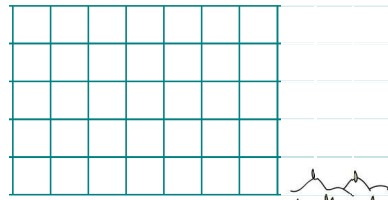How many students sing only? _____

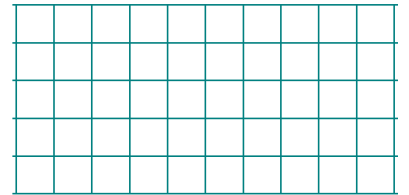*Guitar playing*

11

17

4

Singing

4 Solve the following word problems. Draw diagrams to help you if you want.
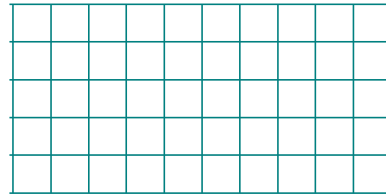
A. A gardener can prune 63 fruit trees in 9 hours. How many trees can the Gardner prune in 5 hours?
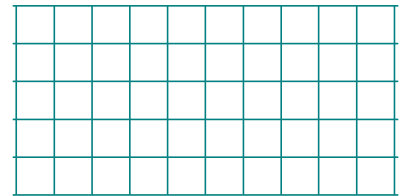
_____

_____

B. There are 5 cucumbers in each of *s* bowls. There are 3 tomatoes on each of *w* plates. How many vegetables are there in total?

_____

_____

C. Annie jogs 35 km per week. Every week day she joggs 4 km. On Saturday she joggs 10 km. How many kilometers does she jog on Sunday?

_____

_____

D. 9 identical boxes contain 36 cookies. Foxy Tail took *w* of these boxes. How many cookies did he take?

_____

_____

5 **In your notebook** solve the following equations and check you answers. Once they are correct copy them here. Make appropriate drawings if need ones.

$y \times 9 = 63$ $z - 9 = 4$ $7 + x = 49$ $49 \div w = 7$

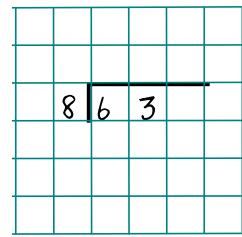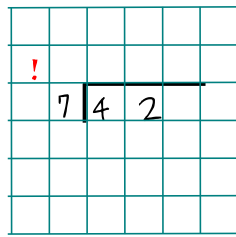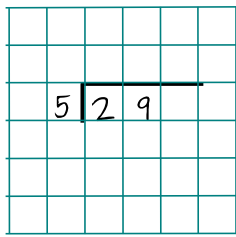$y =$ _____ $z =$ _____ $x =$ _____ $w =$ _____

6 Calculate via long division:

9 [6] 5 | 5 2 [9] | ! 7 [4] 2 | 8 [6] 3
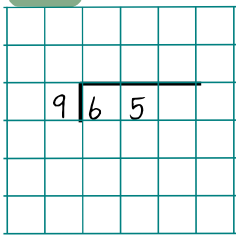
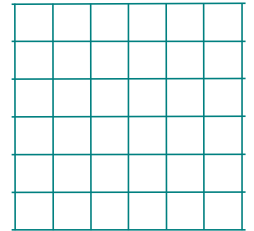**7** The Cat Island Senate allocated 97 cat silver coin on anti mice fence for their cheese factory. The fence will be made out of sections. Each section costs 4 cat silver coins.
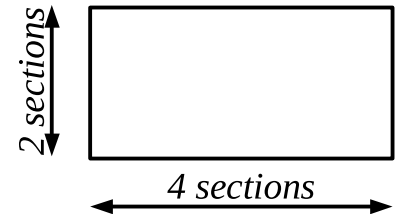
How many sections can the Senate afford?

_____

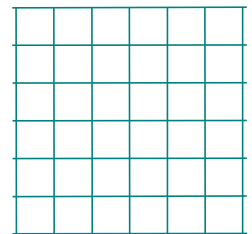How many coins will be left if any?   _____

8 * The Cat Island Senate also allocated **97** cat silver coin on anti mice fence for their strawberry beds. Each bed has to be protected around all of its perimeter. The size of each bed is given on the picture.
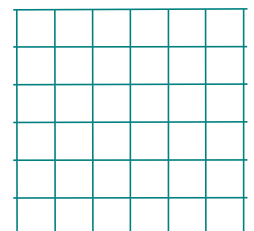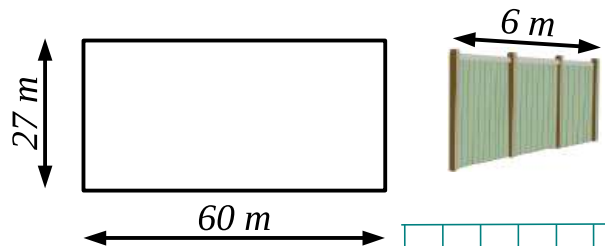
How many fence sections are needed to protect each bed?

_____

How many beds may be fenced individually given the budget?

_____

2 sections

4 sections

9 * The cats have also a 27 by 60 meters orchard. How many fence sections are needed to fence it around in each section is 6 m long?

27 m

60 m

6 m

_____

Fence section cannot be broken; all orchard must be fenced in!

10 Any street has an odd side and an even side.

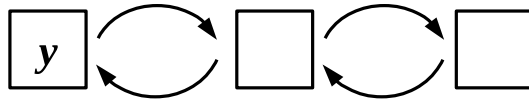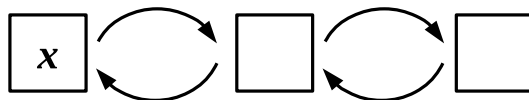What are the numbers of three adjacent houses on a street if their total is 21?

_____

What are the numbers of three adjacent houses on a street if their total is 42?

_____

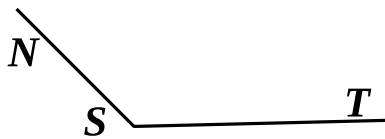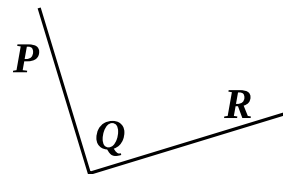**11** Analyze and solve the equations

$x \times 3 - 6 = 15$

x ⟳ ☐ ⟳ ☐

y ⟳ ☐ ⟳ ☐

$y \div 4 + 9 = 22$

12 Determine the kinds of angles on the drawing:

∠*NST* is _____

∠*PQR* is _____

∠*ABC* is _____
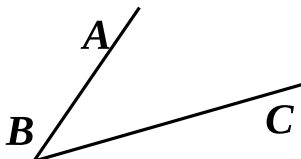
∠*EFL* is _____
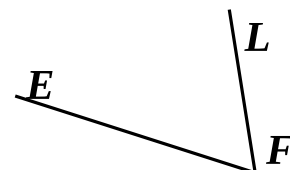
13 In each diagram, shade $A \cup B$.

A B A B A B B A
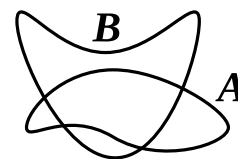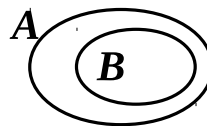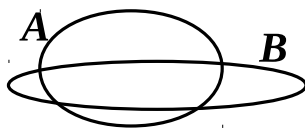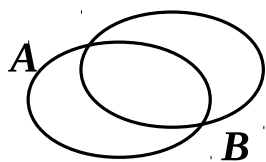
14 In each diagram, shade $A \cap B$.

A B A B A B B A
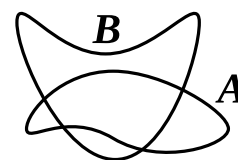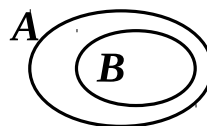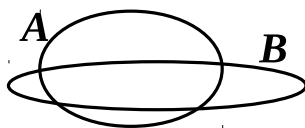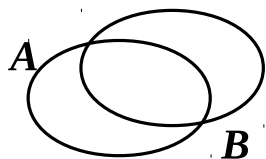
15 Connect the points to obtain …

a). … a five-point star
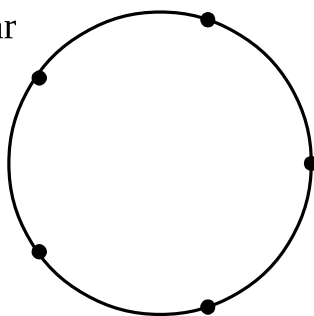
b). a seven-point star

16 Hamsters are very popular pets on the Cat Island. In one of the best Gentlecats Clubs of Cat Island four Gentlecats were discussing their pets.
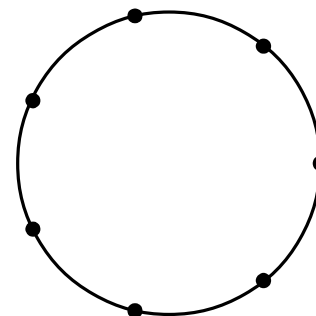
Mr. Red: *Can you guess what color is my hamster?*

Mr. Fluffy: *I am guessing it's not white.*

Mr. White: *It is either beige or red.*

Mr. Short Tail: *I know it is beige.*

Mr. Red: *At least one of you is right AND at least one of you is wrong.*

Can you help them answer Mr. Reds question?

	If the hamster is …		
	… W	*… B*	*… R*
Mr. Fl.			
Mr. W.			
Mr. ST.		✔	