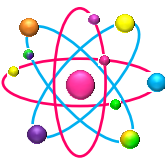


A vibrant collage of mathematical symbols and tools. In the center, a large, teal number '4' is displayed on a white rectangular background with a dashed orange border. Surrounding this central element are various math-related items: a ruler with markings and a red line, a purple calculator, and several large, stylized numbers in teal and purple, including '5', '3', '8', '10', and '20'. The background is a mix of these colors, creating a dynamic and educational atmosphere.

4

A close-up photograph of an abacus, showing several rows of white beads on dark wooden rods. The perspective is from a low angle, looking down at the beads.

Math



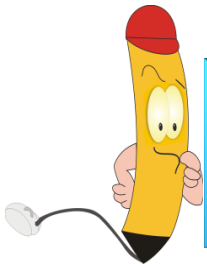
Know the contents

The Miami Virtual School, presented through texts for elementary education program and sequence of natural science content, enriched with several videos and subtopics. With this text handling you acquire attitudes, skills, abilities and concepts that allow you to expand your worldwide.

Your contents are grouped into four sessions containing topics and subtopics of several pages. Each topic begins with a title, a series of questions whose purpose is to arouse your interest in the contents, you can use these questions at the end of a topic to test your learning. You'll find images related to the concepts and themes, videos, charts, concept maps with didactic sense

The virtualitos help you journey through this adventure of knowledge.

Inquire to...



When you find this icon you know that there are many unanswered questions, which you can use at the end of a topic to find what you have learned.



When you find this icon you have to carry out the activities for each topic or subtopic.



Art is part of your activities, giving a personal touch when you go to color. Now you are the artist!



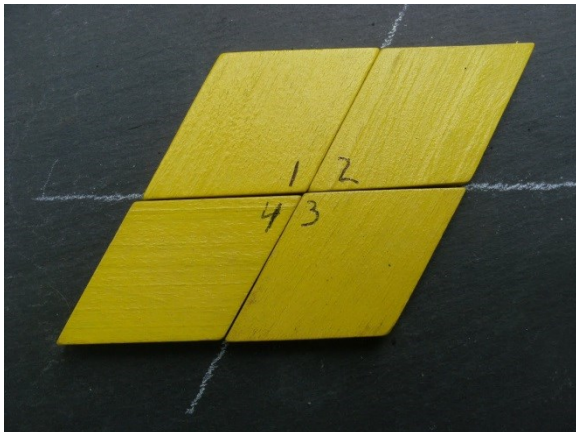
Virtualito invites you to learn more about the theme, research new things. That's interesting to know!



Did You know that...?
You'll find fun facts that invite you to learn about other related topics



Application Guide



A **proposition** is a declaration that can be either true or false, but not both.

Example. Find out, where is a proposition:

- a. The sea, the sun, the beach.
- b. $8 + 5$
- c. The animals are fed.
- d. Luis and Carmen.

The right answer is "c". We can say whether it is true or false, so the answer is:

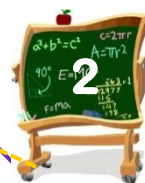
"The animals are fed" is a proposition.

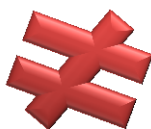
1. The negation of the proposition "5 is odd number" is:

- a. Some numbers are odd.
- b. 5 is prime.
- c. 5 is not odd.
- d. There are other odd numbers.

2. $X = \{4, 3, 2, 8\}$. True quantification regarding of X is:

- a. Is a number greater than 8.
- b. Some numbers are multiples of 5.
- c. All numbers are even.
- d. No number is less than 2.





3. The negation of "We are all friends" is:

- a. We are all enemies.
- b. We are all brothers.
- c. Some are friends.
- d. None of the above.



4. The negation of "some children laugh", is :

- a. All children laugh.
- b. No child laughs.
- c. Some children do not laugh.
- d. All of the above.

5. The set is properly defined:

- a. $A = \{M, P, Q\}$
- b. $A = [mpq]$
- c. $A = m, p, q$
- d. $A = \{m, p, q\}$

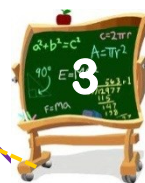
6. The set $\{e, i, o\}$ is determined by expression:

- a. vowels of the word {caviar}
- b. vowels of the word {skating}
- c. vowels of the word {Mexico}
- d. vowels of the word {pretending}

7. $A = \{e, s\}$ $B = \{s, i\}$ $D = \{e, s, t, o\}$

So:

- a. $A = B$
- b. $A \subset C$
- c. $B \subset D$
- d. $A \subset B$





8. $X = \{1, 3, 5\}$ $Y = \{2, 3, 4\}$

So $X \cup Y$ is:

- a. $\{1, 2, 3, 4, 5\}$
- b. $\{1, 2, 4, 5\}$
- c. $\{3\}$
- d. $\{2, 4\}$

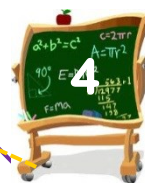
9. $P = \{3, 5, 7, 9\}$ $Q = \{1, 5, 10\}$; so $P \cap Q$ is:

- a. $\{3, 5, 7, 9, 10\}$
- b. $\{1, 3, 5, 7, 9, 10\}$
- c. $\{\}$
- d. $\{5\}$

10. To make a cake need: flour, sugar, eggs, butter, raisins.

In the pantry are: flour, eggs and raisins.

Which ingredients complement those in the pantry?
Make the diagram.












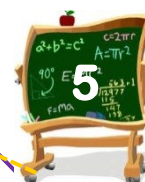
11. Copy and answer.

a. Recognize expressions that are propositions. Underline them:

1. Week has seven days.
2. Twelve is an odd number.
3. $3 \times 2 = 6$
4. What is the capital of Puerto Rico?
5. $15 - 7 = 9$
6. I'm tired!
7. Quito is the capital of Ecuador.
8. % Is greater than eight.
9. $7 + 3$
10. 6 is the double of 3.

12. Write in front of each proposition T (true) or F (false) as your opinion:

The		Are live.	(T)
The		have scales.	
The		has teeth.	
The		does not bark.	
The		Howls.	
The		Is vertebrate.	
The		Do not have bones.	
The		Meows.	





13. For the following numerical propositions define, are they false or true?

- a. $40 \times 30 = 120$
- b. $2 \times (5 + 2) = 12$
- c. $15 + 28 = 33$
- d. $36 \div 4 = 9$
- e. $16 \times 8 = 118$
- f. $25 \times 10 = 250$

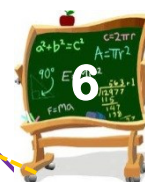
15. Complete the propositional negations:

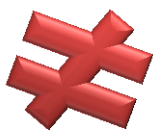
- a. 3 is even _____
- b. 5 is greater than 2 _____
- c. 10 is twice of 5 _____

16. Think before you decide whether statement is true or false.

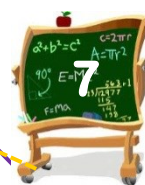
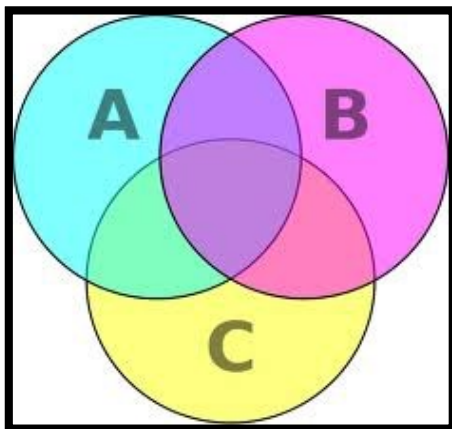
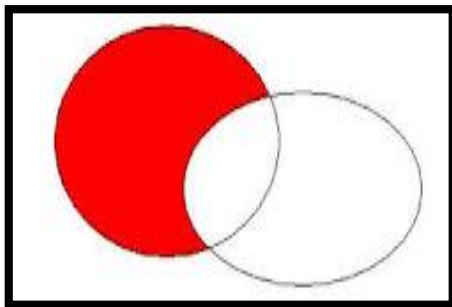
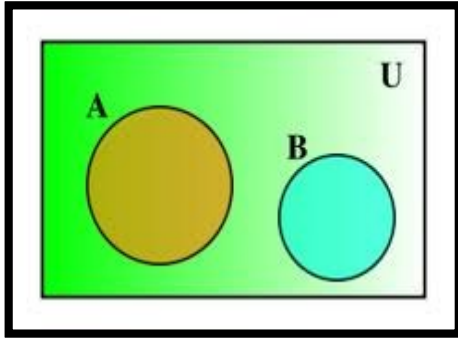
- a. The months of 30 days are the complement of the months of 31 days. ()
- b. Vowels are the complement of the consonants. ()
- c. Vertebrates are the complement of invertebrates. ()
- d. Even numbers are the complement of the odd numbers. ()
- e. The numbers above one hundred are the complement of numbers less than one hundred. ()

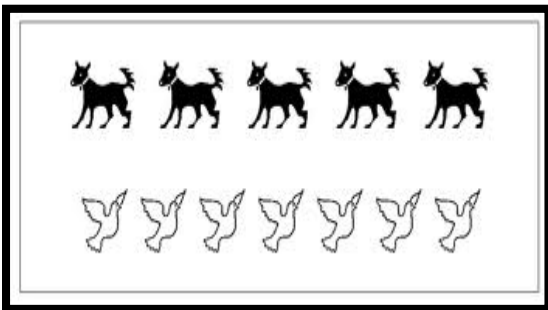
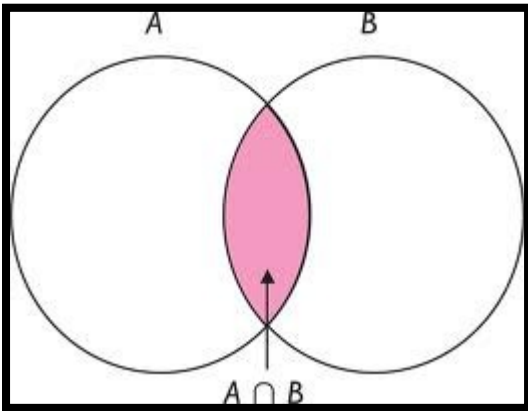
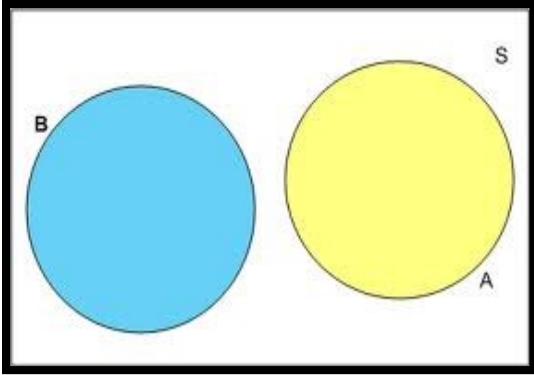
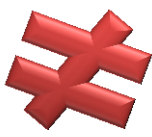
17. Write five sentences with their negations.





18. Complete diagrams.





Congratulations!
You have finished the
mathematics unit one
Do not forget to send the guide and
activities by email.

