

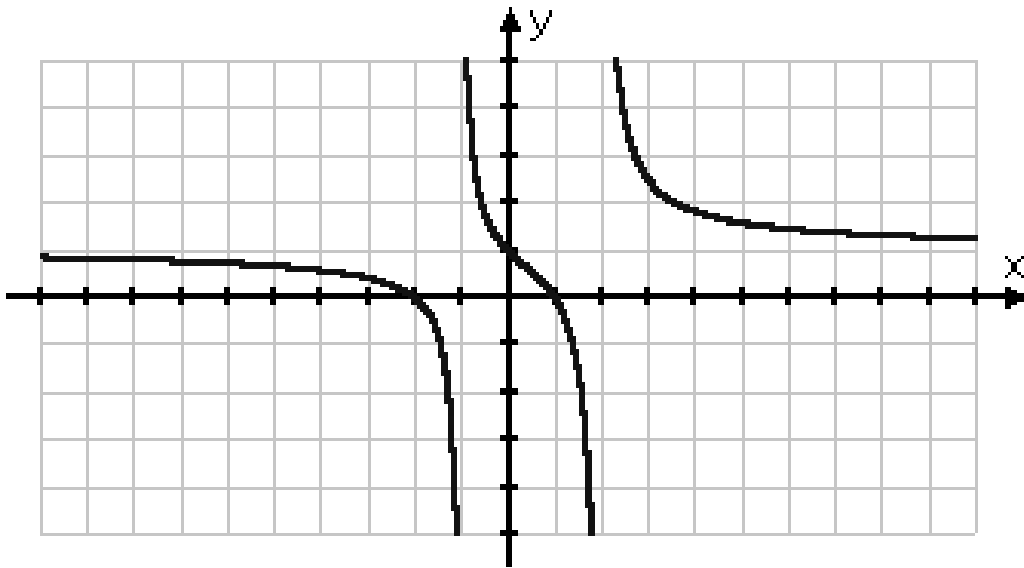
High School TELPAS Prompts



Math TELPAS Prompts

- What is the difference between domain/range for the function and domain/range for the problem situation? Give an example.
- How is the ordered pair and domain/range interrelated?
- How would you distinguish between discrete and continuous data? Give an example of each. How would you determine if the given data is functional?
- How is the ordered pair and domain/range interrelated?
- What is the difference between domain/range for the function and domain/range for the problem situation? Give an example.
- How would you distinguish between discrete and continuous data? Give an example of each.
- How would you determine if the given data is functional?
- How can you use the properties of transformations to explain the connections between geometry and Algebra II?
- How can various representations of data be used to determine the slope of a line?
- How could you verify that the intercepts of a line are correct?
- Given parts of a line, how would you determine the equation of the line?
- What are some of the different ways that you can represent a given problem situation of collected data?
- What are some of the different ways that you can represent a given problem situation of collected data?
- How does the domain and range of the problem situation differ from the domain and range of the function?
- What is the significance of a dashed and solid line on an inequality function?
- What are two ways to determine which side of the line to shade on an inequality function?
- What are the differences between a linear equation and linear inequality?
- What is the meaning of absolute value?
- How does the graph of a linear function compare with an absolute value function?
- What effects do parameter changes have on the absolute value parent function?
- Why is it important to convert from verbal language into mathematical language?
- How is order of operations used when evaluating algebraic expressions?
- What two graphing calculator methods can be used to evaluate algebraic expressions, given values of variables?
- How are the properties of equality used to solve linear equations?
- How are the properties of equality used to solve linear equations?
- How are inverse operations used to solve linear equations or inequalities?
- How do you determine if a numerical solution of a linear equation or inequality is correct?
- Why is the absolute value of a number never negative?
- What are the major points for solving an absolute value equation?
- How are absolute value equations and inequalities similar to linear equations and inequalities?
- What are the major points for solving an absolute value equation?
- How are absolute value equations and inequalities similar to linear equations and inequalities?
- What methods can be used to solve real-world problem situations that involve equations or inequalities?
- What are the possible solutions to a system of equations?
- What are the different methods used to find the solution to a system of equations?

- What does it mean for a system of equations to have no solution?
- What does it mean for a system of equations to have infinite solutions?
- How do you justify the reasonableness of the solution?
- How does the solution to a 3×3 system differ from the solution to a 2×2 system?
- How do you know a problem situation will require a 3×3 system?
- Which method of solving 3×3 systems do you prefer and why?
- How do you compare a polynomial to a non-polynomial?
- How are the properties of exponents used to simplify polynomials?
- How does the real number system compare to the complex number system?
- What are the effects on the graph of $y=x^2$ caused by the values of a , h , and k in the function $y=a(x-h)^2+k$? How can a graphing calculator be used to construct a table of values for graphing a quadratic function?
- What are two ways that the solution of a quadratic equation can be found using a graphing calculator? What are two algebraic methods for solving quadratic equations? What is the discriminant, and how can it be used to analyze solutions of quadratic equations?
- How can transformations be used to graph radical functions? How can a graphing calculator be used to check transformations on a radical function?
- How can differences and quotients be used to determine if a function is linear, quadratic, or exponential? How do the various representations of linear, quadratic, and exponential functions compare?
- What approaches can be used to solve equations involving logarithms? What approaches can be used to solve inequalities involving logarithms? What is the difference in the two types of logarithmic equations? When would logarithms be added into an equation in order to solve the equation? What is an application of logarithmic functions in a real world situation?
- How do the procedures for multiplying and dividing rational expressions compare? How do you find a common denominator when combining rational expressions? When simplifying complex rational expressions, why must it involve division of rational expressions?
- How do the parameter changes of the rational parent function affect transformations of the graph?

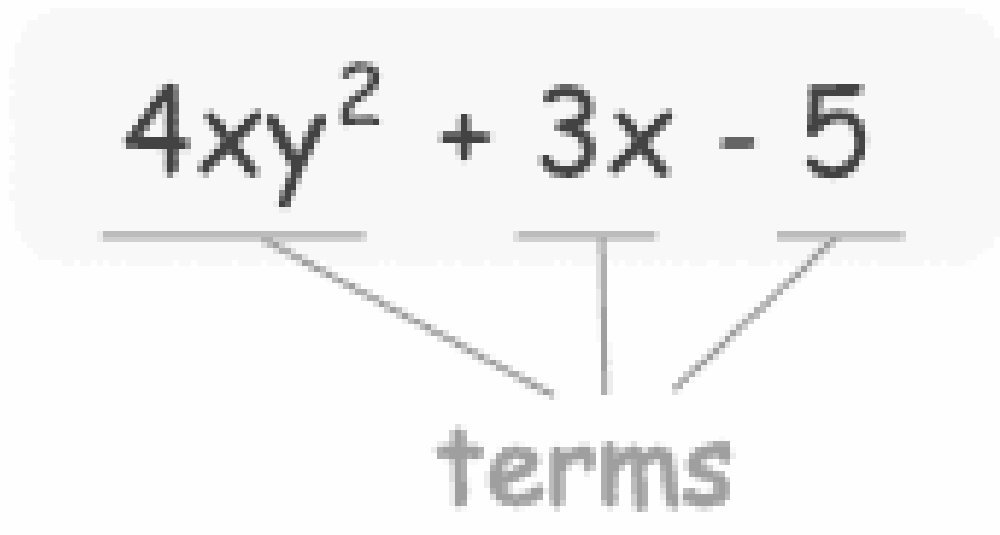


Write an essay explaining the following:

What is the difference between domain/range for the function and domain/range for the problem situation? Give an example.

Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Use Mathematical vocabulary.

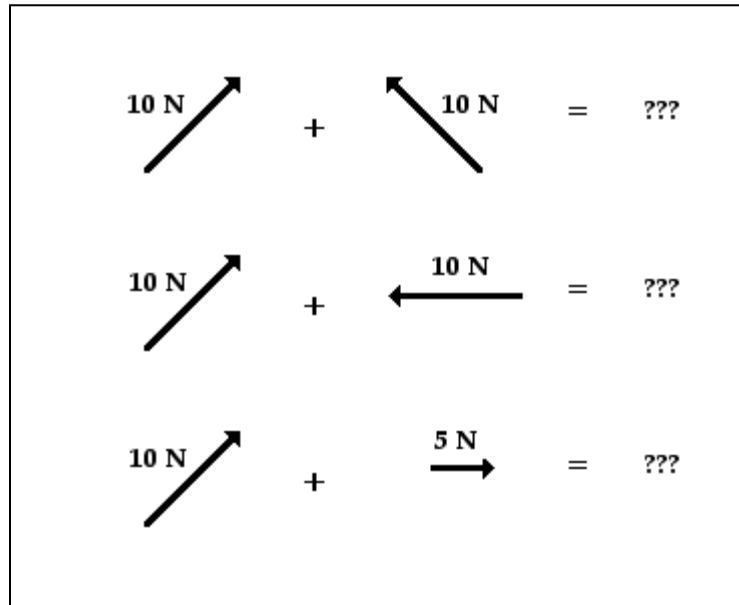


Write an essay explaining the following:

What process do you use to determine how to factor a polynomial?

Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Use Mathematical vocabulary.

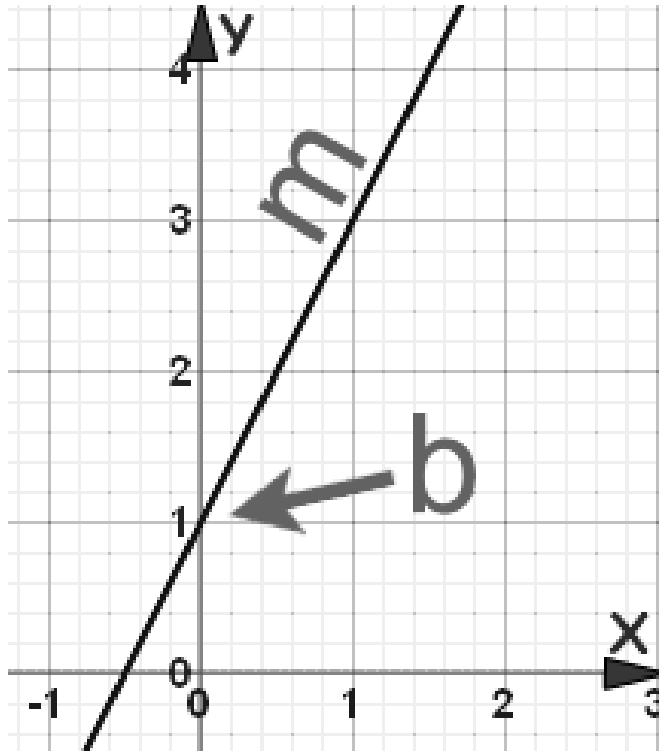


Write an essay explaining the following:

Explain how vectors can be used to model situations defined by magnitude and direction.

Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Use Mathematical vocabulary.



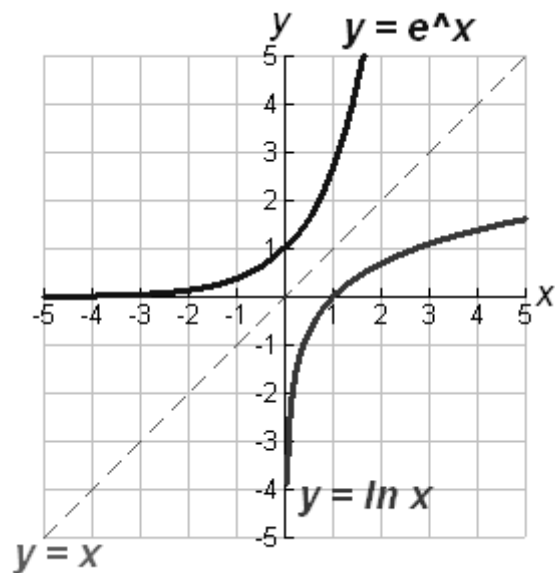
Write an essay explaining the following:

Explain how to graph and write equations of lines. Give characteristics such as two points, a point and a slope, or a slope and y-intercept.

Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Use Mathematical vocabulary.

Independent Studies in Mathematics



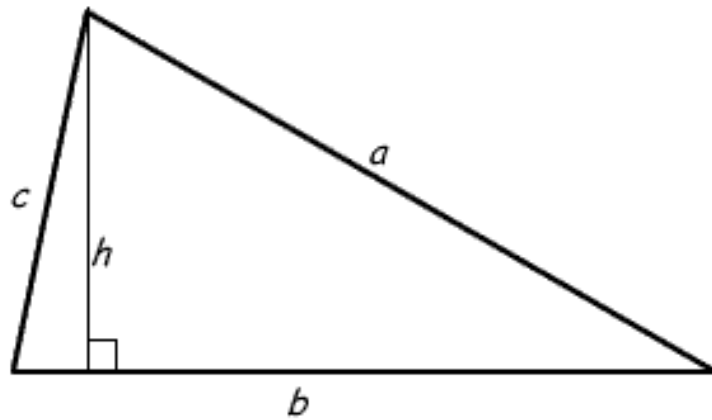
Write an essay explaining the following:

Describe the relationship between exponential functions and their inverses.

Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Use Mathematical vocabulary.

Perimeter $p = a + b + c$



Write an essay explaining the following:

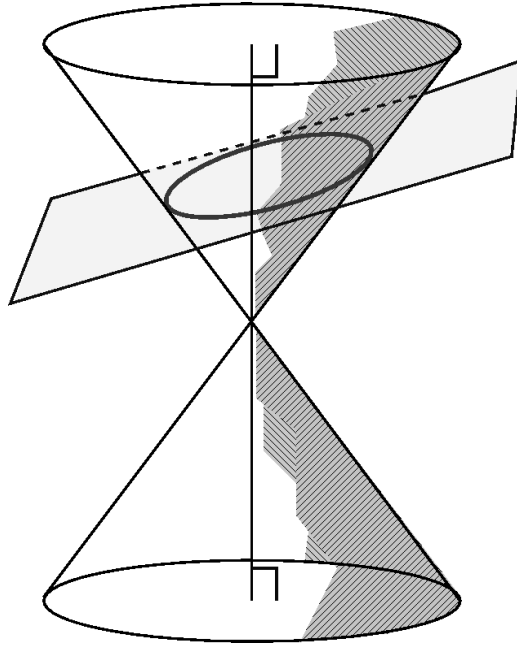
Describe the effect on perimeter, area, and volume when length, width, or height of a three-dimensional solid is changed.

Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Use Mathematical vocabulary.

Pre-Calculus

Look at the picture below



Write an essay explaining the following:

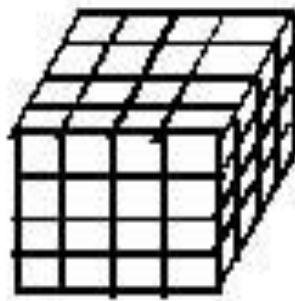
Using properties of conic sections, describe physical phenomena such as the reflective properties of light and sound.

Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Use Mathematical vocabulary.

Math TELPAS Writing Prompt

Below is a $4 \times 4 \times 4$ cubic block of wood. Suppose all six faces of the cube are painted red and the cube is then cut into $1 \times 1 \times 1$ cubes along the lines shown. How many $1 \times 1 \times 1$ cubes will have red paint on just two faces? Explain your answer in detail.

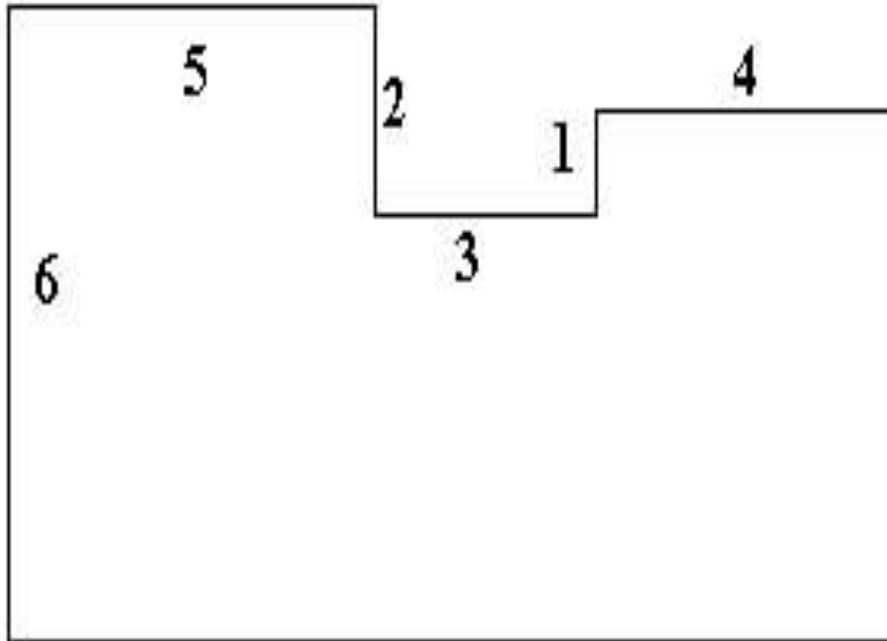


Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Use Mathematical vocabulary.

Math TELPAS Writing Prompt

In the figure below, all corner angles are right angles and each number represents the unit-length of the segment which is nearest to it. How many square units of area does the figure have? Explain your answer in detail.

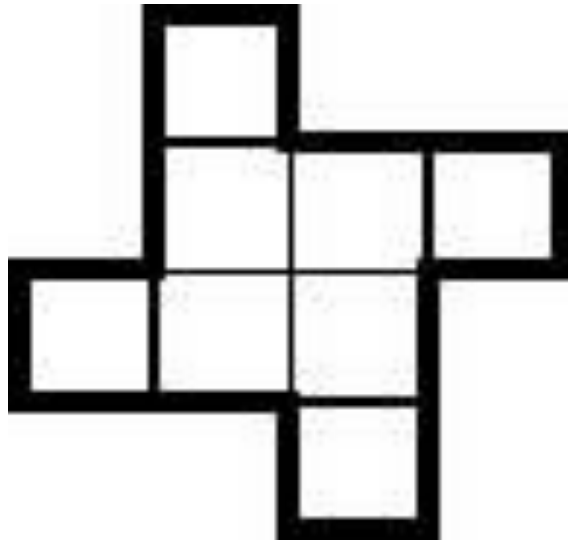


Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Use Mathematical vocabulary.

Math TELPAS Writing Prompt

The figure below is divided into 8 congruent squares as shown. The area of the figure is 72 square feet. What is the length of the darkened border in feet? Explain your answer in detail.

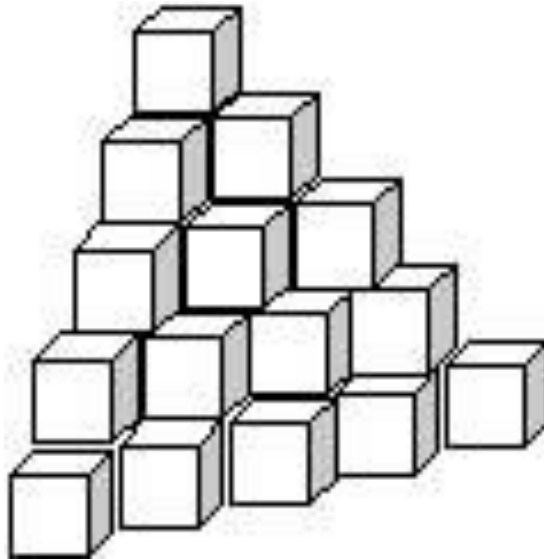


Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Use Mathematical vocabulary.

Math TELPAS Writing Prompt

The tower below is made up of five horizontal layers of cubes with no gaps. How many individual cubes are in the tower? Explain your answer in detail.

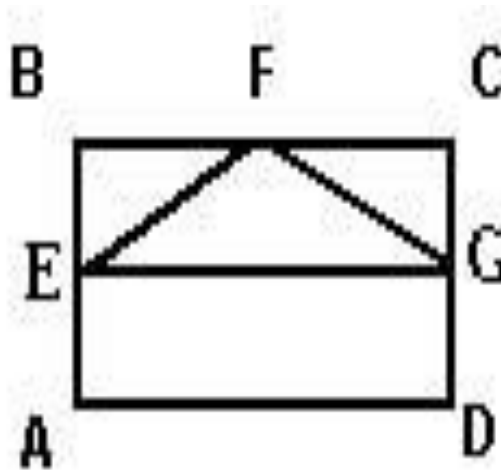


Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Use Mathematical vocabulary.

Math TELPAS Writing Prompt

ABCD is a rectangle with area equal to 36 square units. Points E, F, and G are midpoints of the sides on which they are located. How many square units are there in the area of triangle EFG? Explain your answer in detail.

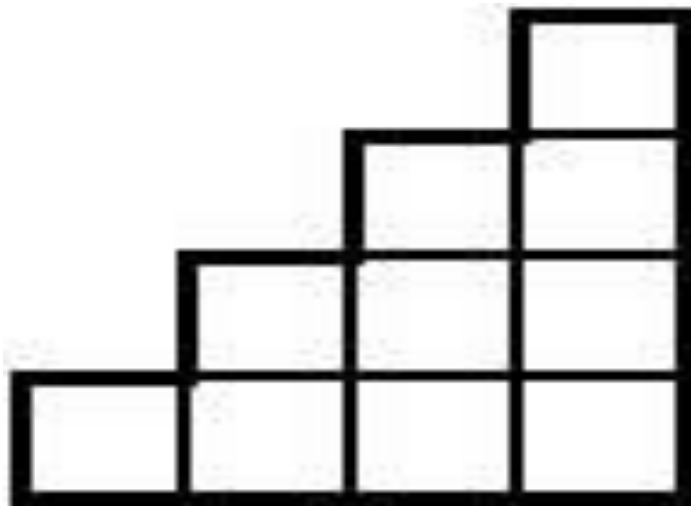


Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Use Mathematical vocabulary.

Math TELPAS Writing Prompt

The “staircase” below is 4 units tall and contains 10 unit squares. Suppose the staircase were extended until it was 12 units tall. How many unit squares would it then contain all together? Explain your answer in detail.

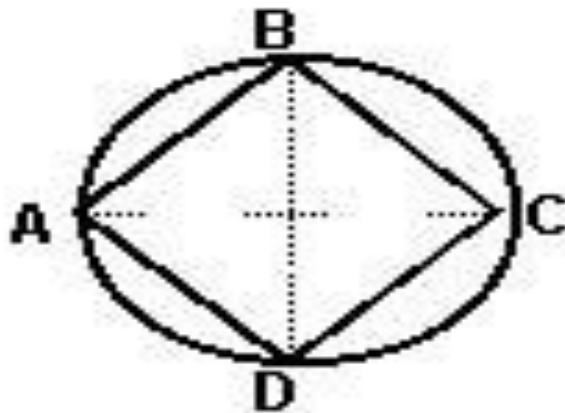


Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Use Mathematical vocabulary.

Math TELPAS Writing Prompt

Square ABCD has all four of its vertices on a circle with diameter 10 units in length. Segments AC and BD are diameters. How many square units of area does square ABCD have? Explain your answer in detail.

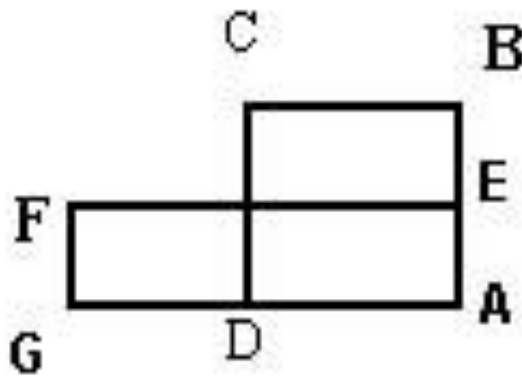


Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Use Mathematical vocabulary.

Math TELPAS Writing Prompt

Square ABCD and rectangle AF-FG each have an area of 36 square meters. E is the midpoint of AB. What is the perimeter of rectangle AEFG?



Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Use Mathematical vocabulary.

Math TELPAS Writing Prompt

Suppose all the counting numbers are written in columns in the pattern shown below. Name the letter of the column in which the number 1000 will appear. Explain your answer in detail.

A	B	C	D	E	F	G
1		2		3		4
	7		6		5	
8		9		10		11
	14		13		12	

Remember to:

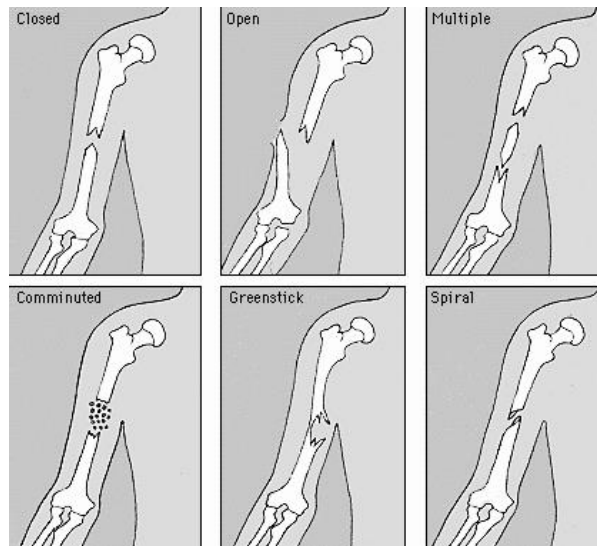
- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Use Mathematical vocabulary.

High School Science TELPAS Prompts

- Describe procedures used to conduct a controlled experiment.
- What do you think is the function of the abstract section?
- Why is this function important? Using the scientific method, conduct an experiment using.....
- What if scientists just found out that the world is round. How would this impact the world?
- Describe Jane Goodall's research and explain how it has impacted our society?
- Choose three anthropods and describe what kind of food sources these organisms may use.
- Choose two organisms that live in different biomes an discuss how their adaptations have enabled them to survive in their environment.
- Explain what would happen if _____ & _____ were suddenly moved to a new environment. Why would these changes occur?
- Compare and Contrast the four types of Triglycerides
- What are the building blocks and functions of carbohydrates, proteins, lipids and nucleic acids?
- List some foods where you can find carbs, proteins, and lipids?
- Discuss why cells are considered the basic structure of all living things and how their specialized parts perform specific functions.
- Compare the energy flow in photosynthesis to the energy flow in cellular respiration.
- How are the products and reactants of photosynthesis and cellular respiration related?
- Why do some traits appear in a population more often than in others?
- How can the genotypes and phenotypes of potential offspring be predicted?
- Create a Punnett Square and complete it with heterozygous and homozygous traits. Explain why and how you chose those traits.
- Compare DNA and RNA.
- Describe the structure and function of the mRNA, tRNA, and rRNA.
- What is the genetic code?
- What is adaptation and how does it occur?
- What does the word "fittest" mean in the phrase "survival of the fittest:?"
- How is genetic information useful in determining phylogenic relationships?
- Explain why using more than one source of information is essential to determine phylogenic relationships.
- What are examples of other types of evidence used to determine phylogenic relationships?
- Explain how the vascular system of the plant functions.
- How does the plant use the process of photosynthesis to make its own food?
- What would happen to a plant if the cells in leaves did not have chloroplasts?
- Discuss some of the most unique structures found with the animal kingdom.

- How are physical and chemical properties used to identify substances?
- How is the mole used in chemical calculations?
- How is Avogadro's number used to calculate the number of representative particles in any given mass of an element or compound?
- How are chemical reactions classified?
- How can a limiting reagent be determined?
- What factors affect solubility?
- Does temperature have the same affect on the solubility of all solutes?
- How does the amount of solute per solvent affect the concentration of the solution?
- How can colligative properties be used in everyday life?
- What is oxidation? Explain your answer.

Anatomy

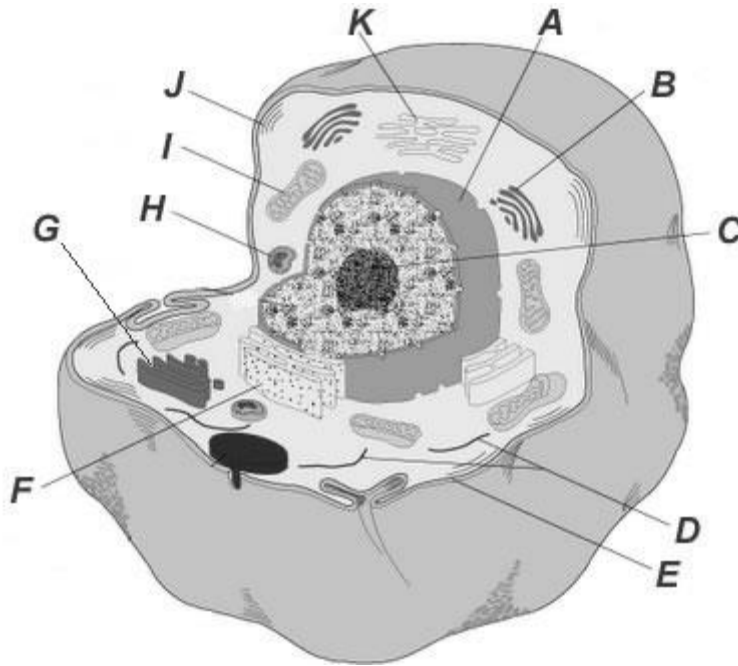


Write an essay explaining the following:

Explain bone diseases and disorders and describe how their debilitating effects and resulting ailments can leave someone disabled for their entire life.

Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Use Science vocabulary.



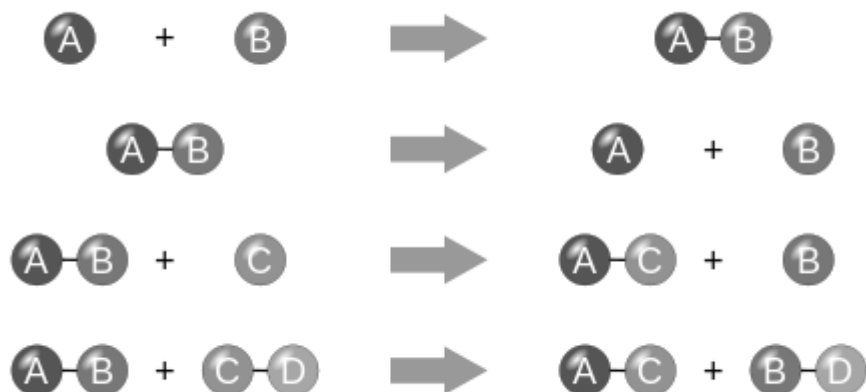
Write an essay explaining the following:

Discuss why cells are considered the basic structure of all living things and how their specialized parts perform specific functions.

Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Use Science vocabulary.

Chemistry



Write an essay explaining the following:

Explain how are chemical reactions balanced and how they are classified.

Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Use Science vocabulary.

$$E_k = \frac{1}{2}mv^2$$

E_k = kinetic energy of object

m = mass of object

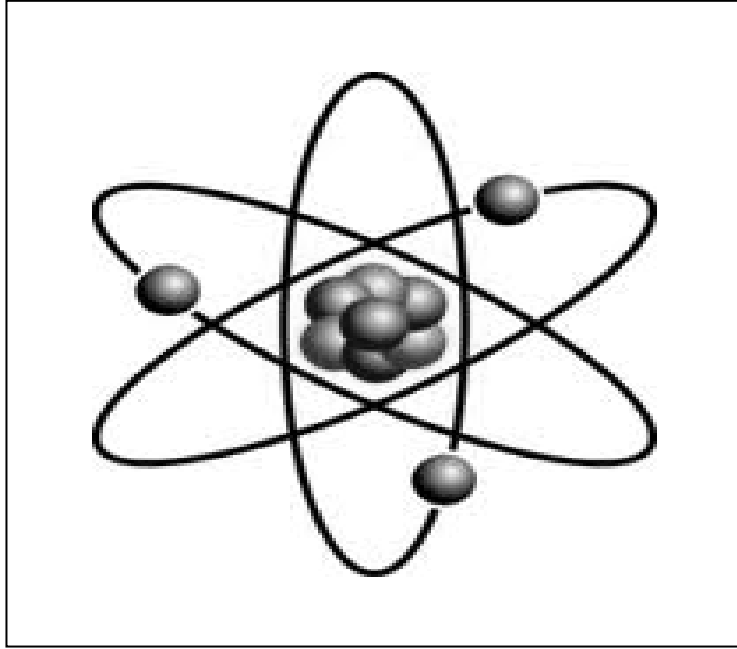
v = speed of object

Write an essay explaining the following:

Explain how objects and substances in motion have kinetic energy. Provide examples.

Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Use Science vocabulary.



Write an essay explaining the following:

Atoms have subparts. What are they? Where are they located? What charge do they have?

Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Use Science vocabulary.

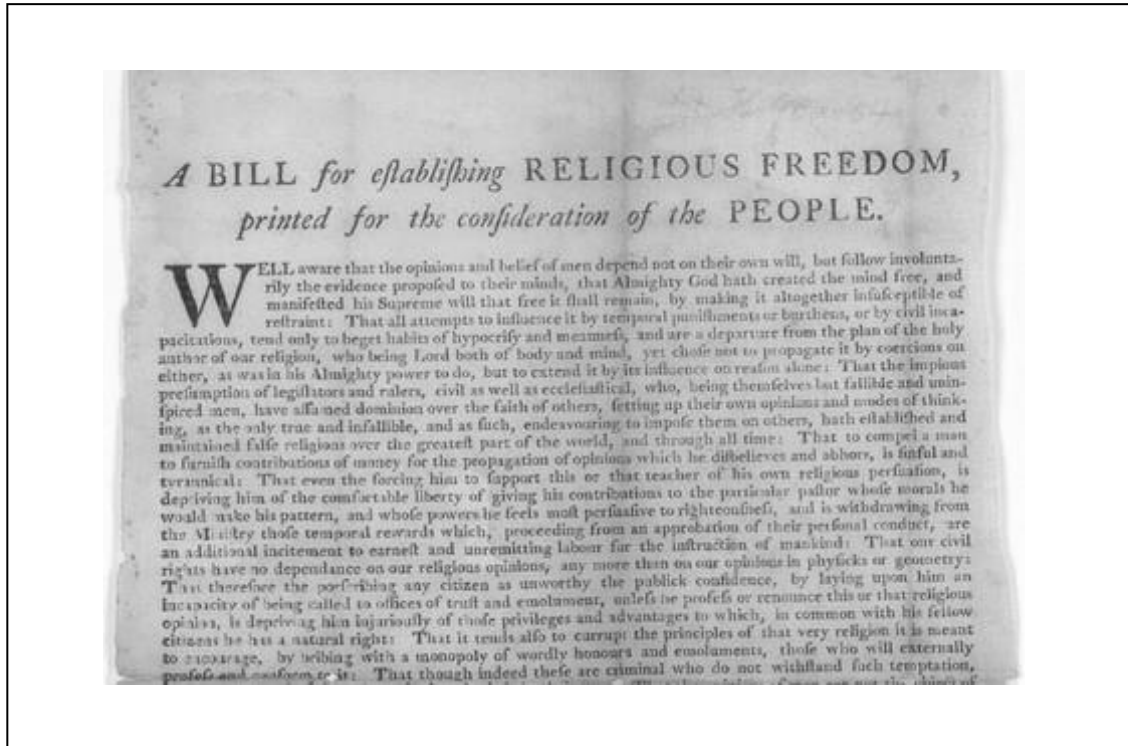


Write an essay explaining the following:

Describe and explain the basic characteristics of economic systems, including property rights, incentives, economic freedom, competition, and the role of government.

Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Use Economic vocabulary

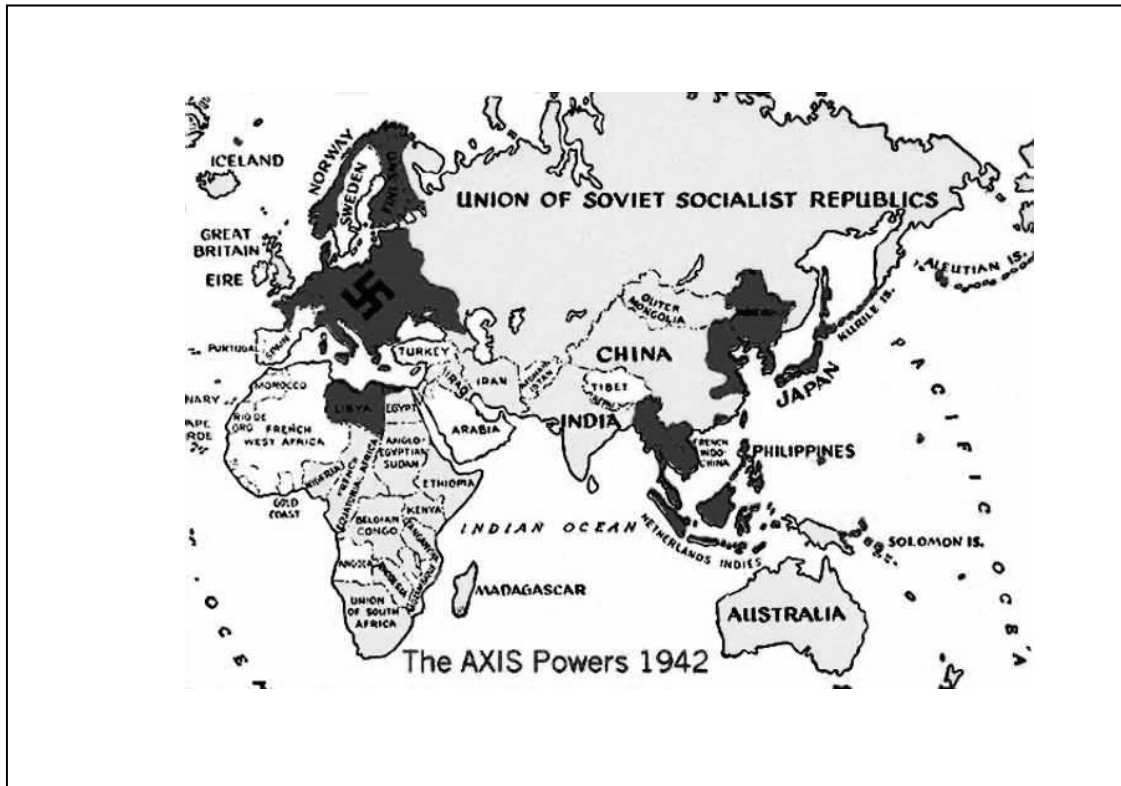


Write an essay explaining the following:

Our Founding Fathers protected religious freedom in the United States and guaranteed its free exercise by saying that "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof." Compare and contrast this to the phrase, "separation of church and state."

Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Use United States Government vocabulary.

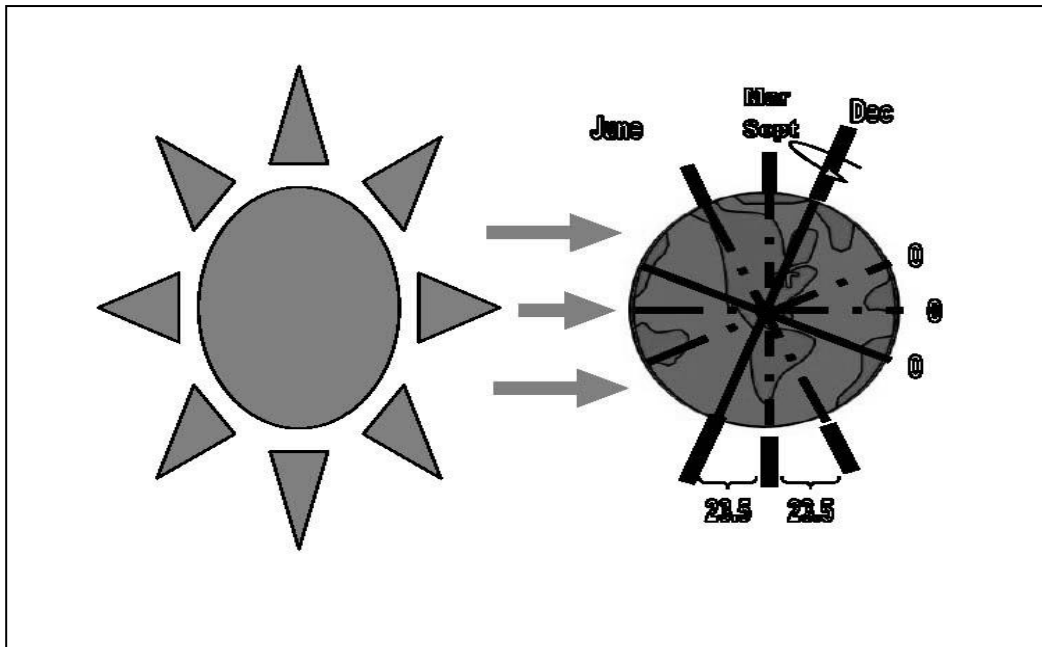


Write an essay explaining the following:

Identify reasons for U.S. involvement in World War II, including Italian, German, and Japanese dictatorships and their aggression.

Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Use United States History vocabulary.



Write an essay explaining the following:

How does the relationship between the Earth and the Sun attribute to the occurrences of weather and climate?

Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Use World Geography vocabulary.



Write an essay explaining the following:

Describe the impact of the development of farming on river valley civilizations.

Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Use World History vocabulary.

Social Studies



Write an essay explaining the following:

Compare and contrast three cultural traits between the United States and an East Asian country. Give examples.

Remember to:

- Take your time and write in as much detail as possible.
- Write in complete paragraphs.
- Use Social Studies vocabulary.



Write an essay explaining the following:

What sacrifices would you be willing to make to have freedom?

Remember to:

- Take your time and write in as much detail as possible.
- Write in complete paragraphs.
- Use Social Studies vocabulary.



Write an essay explaining the following:

Define and give examples of unalienable rights
--

Remember to:

- Take your time and write in as much detail as possible.
- Write in complete paragraphs.
- Use Social Studies vocabulary.

Social Studies



Write an essay explaining the following:

What are the five themes of geography and how do they help you understand a “place”?

Remember to:

- Take your time and write in as much detail as possible.
- Write in complete paragraphs.
- Use Social Studies vocabulary.

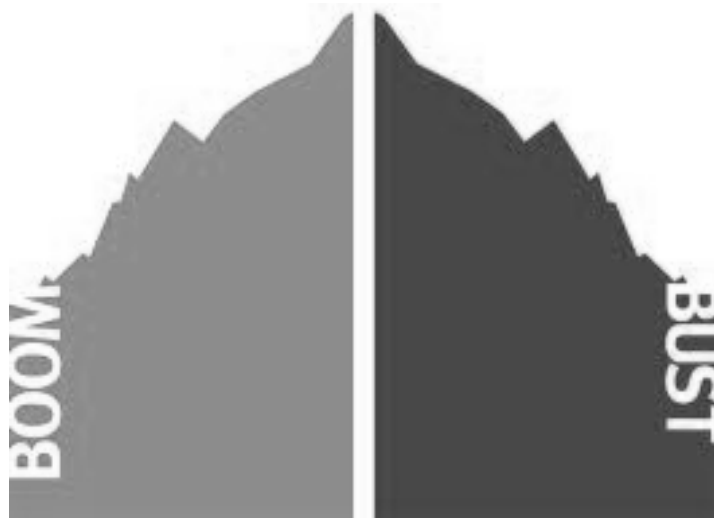


Write an essay explaining the following:

What were the main purposes of European exploration?
--

Remember to:

- Take your time and write in as much detail as possible.
- Write in complete paragraphs.
- Use Social Studies vocabulary.



Write an essay explaining the following:

Explain “boom” and “bust”.

Remember to:

- Take your time and write in as much detail as possible.
- Write in complete paragraphs.
- Use Social Studies vocabulary.



Write an essay explaining the following:

How did the lives of minorities change with the Civil Rights Act of 1964 and the Voting Rights Act?

Remember to:

- Take your time and write in as much detail as possible.
- Write in complete paragraphs.
- Use Social Studies vocabulary.

Write an essay explaining the following:



Why did America participate in World War I and World War II?

Remember to:

- Take your time and write in as much detail as possible.
- Write in complete paragraphs.
- Use Social Studies vocabulary.

Social Studies

Write an essay explaining the following:



Write down as many worldwide religions as you can think of and record at least one interesting fact or perception you have about each one. Then, write down a question you would most like to ask someone practicing a belief.

Remember to:

- Take your time and write in as much detail as possible.
- Write in complete paragraphs.
- Use Social Studies vocabulary.

Look at the picture below



Write an essay explaining the following:

Movies and books often talk about the importance of loyalty and friendship. Tell about a time in your life when friendship proved to be of great importance to you.

Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Write in past tense

HS English 2

Look at the picture below



Write an essay explaining the following:

People often say “Don’t judge a book by its cover.” Describe a time when you misjudged someone based on his or her appearance or when someone misjudged you.

Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Write in past tense

HS English 3

Look at the picture below



Write an essay explaining the following:

People often say, “What you don’t know won’t hurt you,” but the opposite often turns out to be true. Tell about a time when you were hurt by something you didn’t know.

Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Write in past tense

Look at the picture below



Write an essay explaining the following:

It isn't always easy to do what is right, and sometimes it can even be dangerous. Describe a time when you put yourself at risk (physically, socially, emotionally, or professionally) to do what you thought was right.

Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Write in the past tense

Look at the Picture Below



Write a personal narrative about a time you did not agree with a decision your parents made.

Remember to:

- Take your time
- Write in as much detail as you can.
- Write in Past Tense

Look At the Picture:



Write a personal narrative about a time you made a new friend

Remember to:

- Take your time
- Write in as much detail as you can.
- Write in Past Tense

Look At the Picture Below:



Write a personal narrative. Write about a time you reached your personal goal.

Remember to:

- Take your time
- Write in as much detail as you can.
- Write in Past Tense

Look at the Picture Below:



Write a personal narrative or reflective piece. Write about a time you felt sorry for someone

Remember to:

- Take your time
- Write in as much detail as you can.
- Write in Past Tense

Look At the Picture Below:



Write a personal narrative or reflective piece. Write about a time you were embarrassed.

Remember to:

- Take your time
- Write in as much detail as you can.
- Write in Past Tense

Look At the Picture Below:

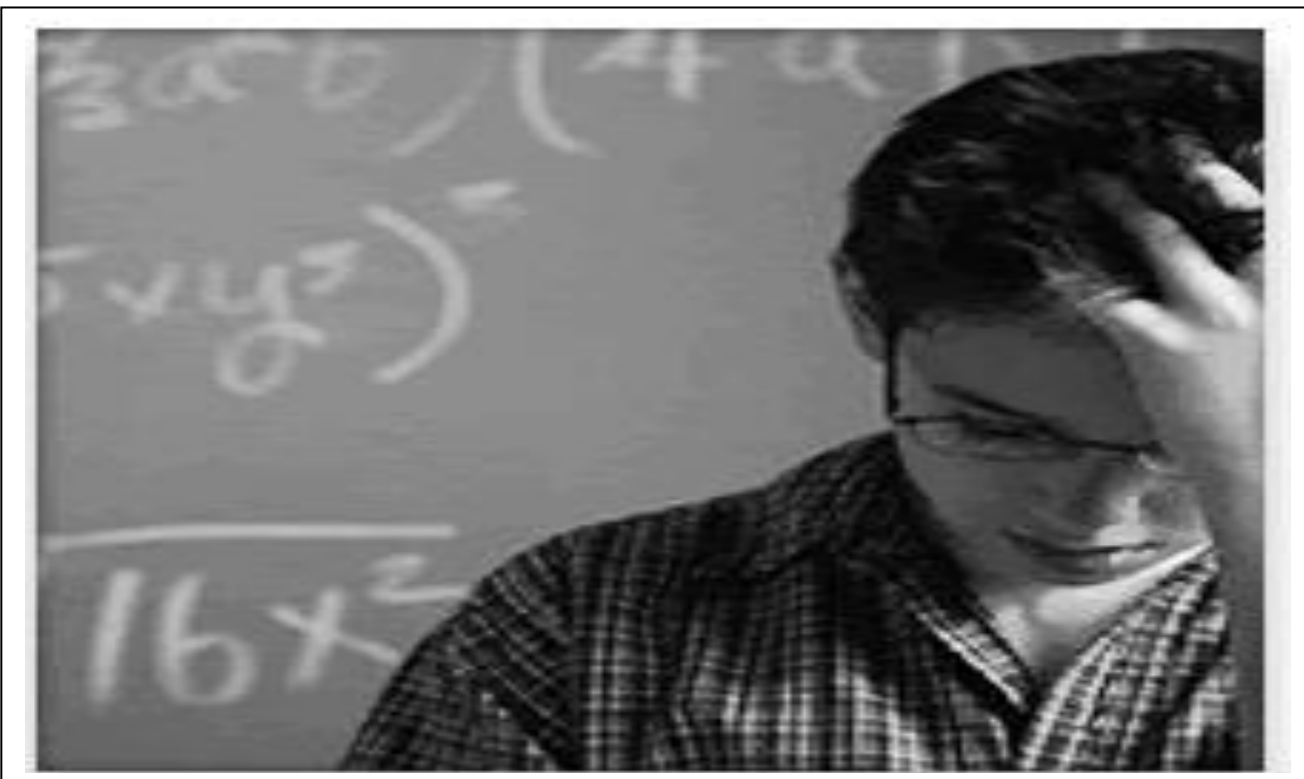


Write a personal narrative or reflective piece. Write about a time you won or lost money.

Remember to:

- Take your time
- Write in as much detail as you can.
- Write in Past Tense

Look At the Picture Below:



Write a personal narrative or reflective piece. Write about a time you were confused about something.

Remember to:

- Take your time
- Write in as much detail as you can.
- Write in Past Tense

Look At the Picture Below



Write a personal narrative or reflective piece. Write about a time your parents were upset with you.

Remember to:

- Take your time
- Write in as much detail as you can.
- Write in Past Tense

Look At the Picture Below:



Write a personal narrative. Describe the perfect day. Start from morning to night

Remember to:

- Take your time
- Write in as much detail as you can.
- Write in Past Tense

Look At the Picture Below:



Write a personal narrative. Describe the best gift you've ever received.

Remember to:

- Take your time
- Write in as much detail as you can.
- Write in Past Tense

Look at the Picture Below:

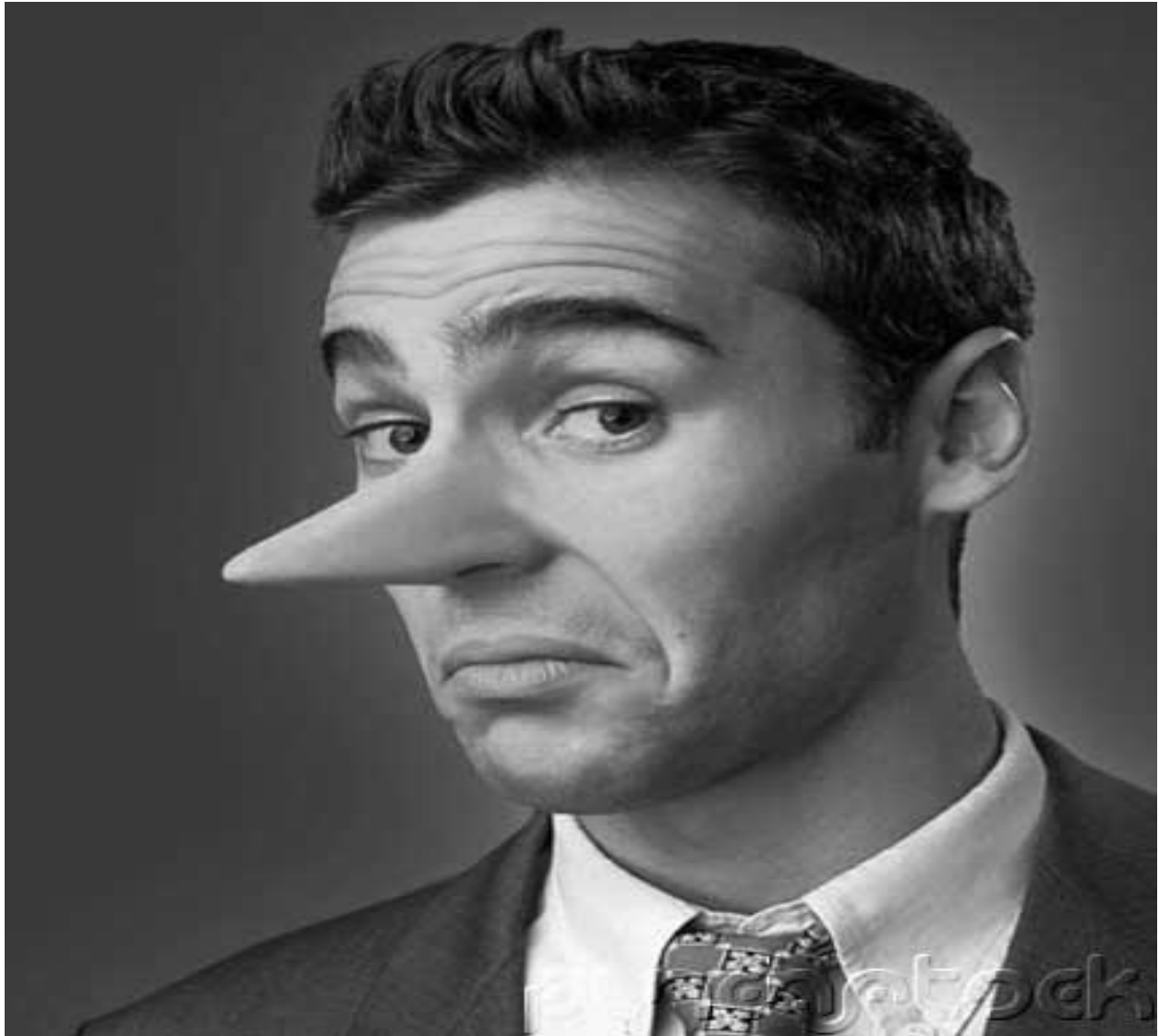


Write a personal narrative or reflective piece. Write about a time you said something you should not have said.

Remember to:

- Take your time
- Write in as much detail as you can.
- Write in Past Tense

Look at the Picture Below:



Write a personal narrative or reflective piece. Write about a time you were dishonest

Remember to:

- Take your time
- Write in as much detail as you can.
- Write in Past Tense

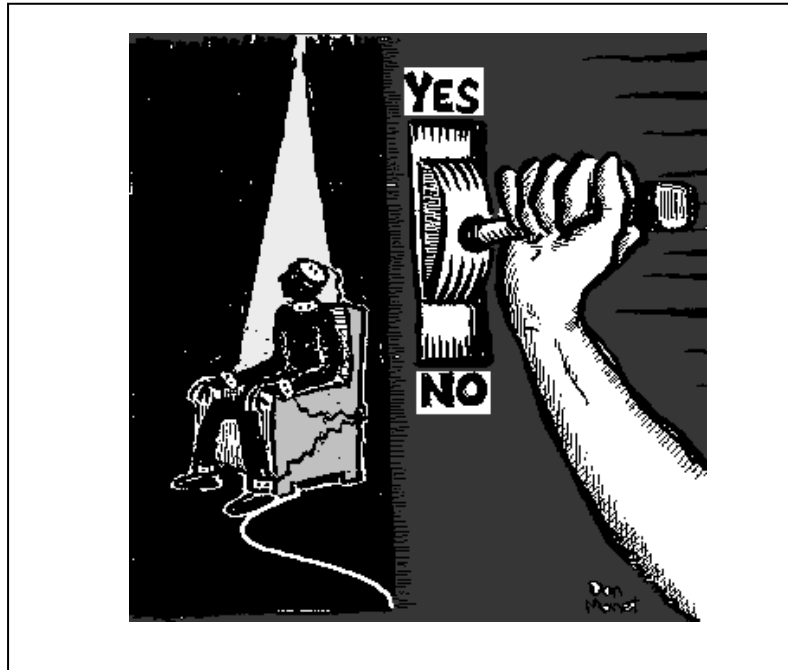
Look at the picture below.



Write a personal narrative about a time you helped someone do something.

Remember to:

- Take your time.
- Write in as much detail as you can.
- Write in Past Tense

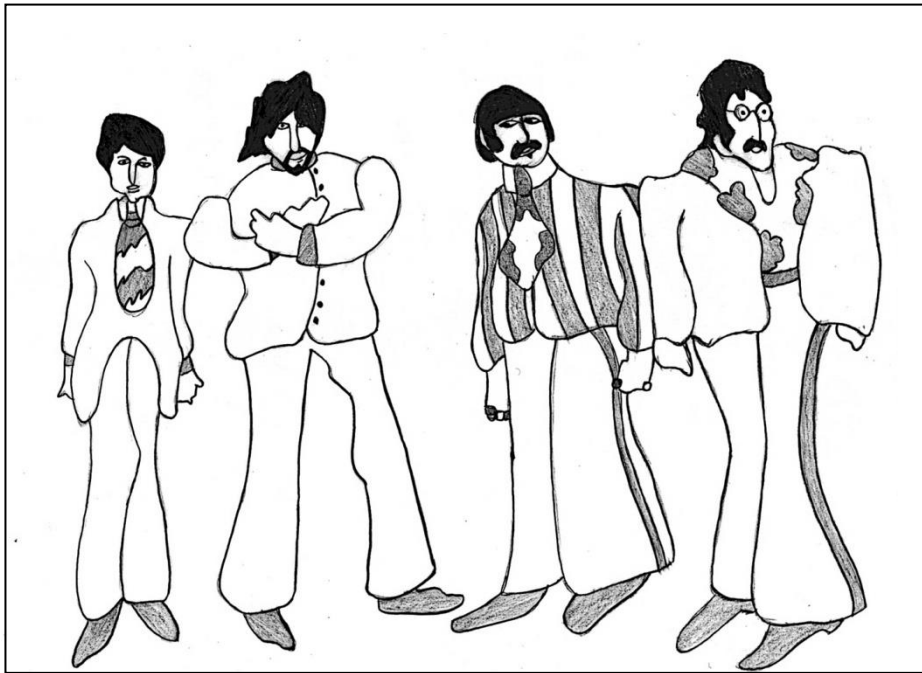


Write an essay explaining the following:

Texas is the number one state when it comes to the death penalty. However, there are citizens who are not in favor of the death penalty. How do you feel about the death penalty? Are you in favor of it or against it? Explain your decision in full detail.

Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs
- Use Criminal Justice vocabulary.



Write an essay explaining the following:

Write a story about the beginnings of a famous musical group.

Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs



Write an essay explaining the following:

Have you ever been just about to drift off to sleep only to be roused because you spontaneously remembered an embarrassing moment from your past?

Remember to:

- Take your time and write in as much detail as possible
- Write in complete paragraphs

High School Electives

Write an essay explaining the following:



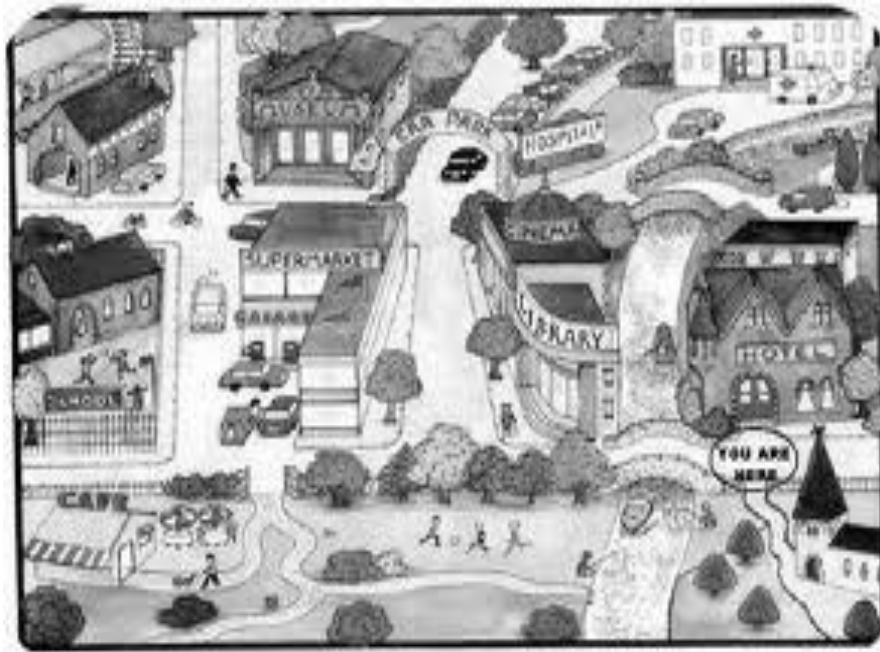
Create a money system the students in your grade could use. What items will be valuable? What will each item be worth? Explain why you think all countries should or should not have the same money system.

Remember to:

- Take your time and write in as much detail as possible.
- Write in complete paragraphs.

High School Electives

Write an essay explaining the following:



Your friend is asking how he can reach you at home. Give specific directions to your house or school. You cannot list street names or distance in terms of miles or blocks. You can only give directions by counting objects. (Example: Go past two house and turn right. Go past four mailboxes and turn left.) Be creative!

Remember to:

- Take your time and write in as much detail as possible.
- Write in complete paragraphs.

High School Electives



Write an essay explaining the following:

Pick one of your favorite sports or hobbies. Explain the role numbers play in your favorite sport or hobby.

Remember to:

- Take your time and write in as much detail as possible.
- Write in complete paragraphs.

High School Electives



Write an essay explaining the following:

Your school has decided to add a new elective and you are on the committee to decide which elective should be offered. Write an essay explaining your choice and then defend your choice.

Remember to:

- Take your time and write in as much detail as possible.
- Write in complete paragraphs.

