

Richmond Hill K-8 8th Grade Learn at Home Assignments



March 14, 2022

All assignments are due on March 15, 2022.
You will receive a grade from each content teacher.

Please check your teacher's Canvas class or teacher webpage at www.rcboe.org/richmondhill for video tutorials and notes. ***Make sure you are reading and following the included instructions for full credit on your assignments.***

Content	Date	Assignment	Instructions
8 th Math	Mar. 15	Slope Types and Slope from a graph	Using the notes and examples provided in class complete the attached worksheets about Slope Type (front) finding slope (back) <ul style="list-style-type: none"> Show your work on the graphs for full credit.
Algebra 1	Mar. 15	Factoring Quadratic Expressions	Using the notes and examples provided in class factor each quadratic expression. <ul style="list-style-type: none"> Show your work on a in the space provided or on a separate sheet of paper for full credit.
ELA/ Reading	Mar. 15	Analyzing Point of View: <i>The Good Earth</i>	Read the excerpt from <i>The Good Earth</i> . <ul style="list-style-type: none"> Then answer the questions that follow. Use the strategies learned in class to annotate and mark the text.
Science	Mar. 15	Wave Introduction and Types; Velocity and Frequency	Read the passage to learn about mechanical waves. <ul style="list-style-type: none"> <input type="checkbox"/> Then fill in the blanks for the questions using the bold terms from the passage. Read the passage about wave velocity and frequency. Also, read the example with the formula for finding a wave's velocity. <ul style="list-style-type: none"> <input type="checkbox"/> Then complete problems 1-4 finding the wave's velocity for the given situation. <input type="checkbox"/> Show your work in the space provided for full credit.
Social Studies	Mar. 15	Georgia State Constitution/Check and Balances Georgia's 3 Branches	Read the passage to learn about Georgia's Constitution. <ul style="list-style-type: none"> then answer the questions in the space provided. Use the passage to cite textual evidence in your answers. Read the passage to learn about the 3 branches of Georgia's Government. <ul style="list-style-type: none"> then answer the questions in the space provided. Use the passage to cite textual evidence in your answers.

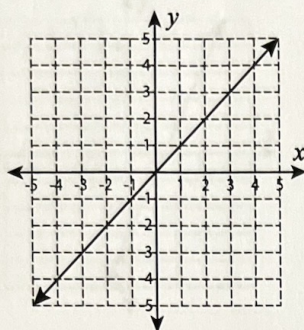
Name : _____

Types of Slopes

Sheet 1

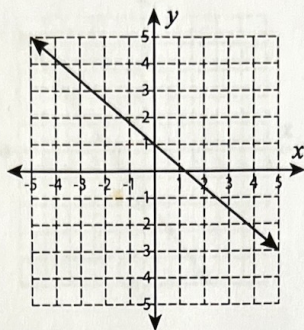
Identify the slope as positive, negative, zero or undefined from each graph.

1)



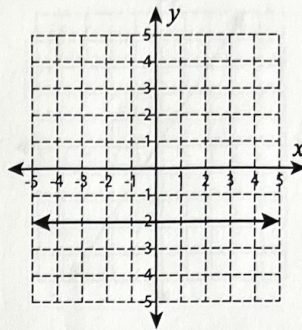
Slope = _____

2)



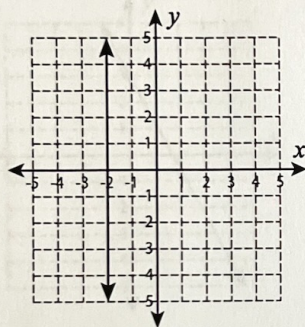
Slope = _____

3)



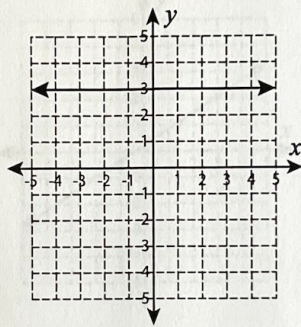
Slope = _____

4)



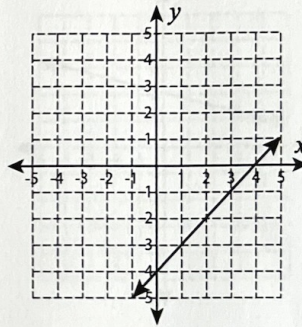
Slope = _____

5)



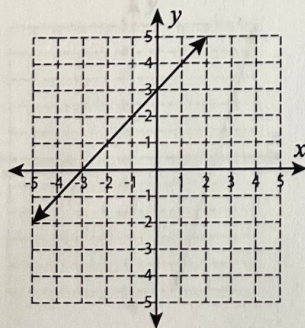
Slope = _____

6)



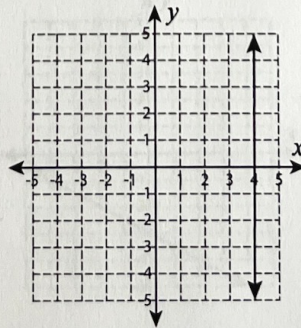
Slope = _____

7)



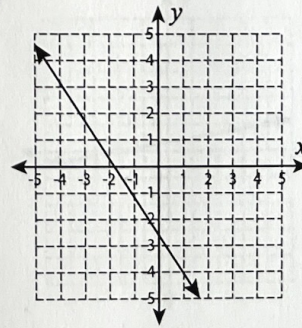
Slope = _____

8)



Slope = _____

9)



Slope = _____

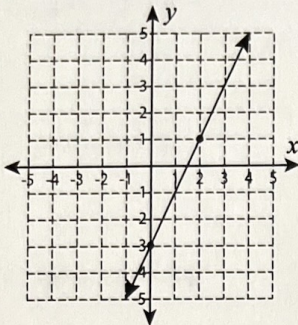
Name : _____

Level 1: S1

Find the Slope

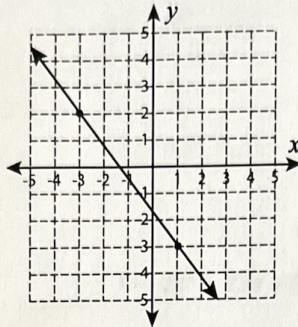
Calculate the rise and run to find the slope of each line.

1)



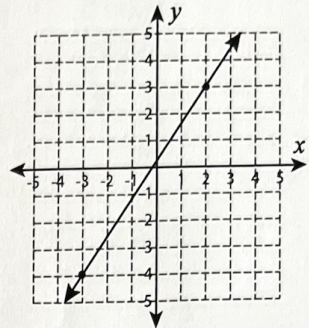
Slope = _____

2)



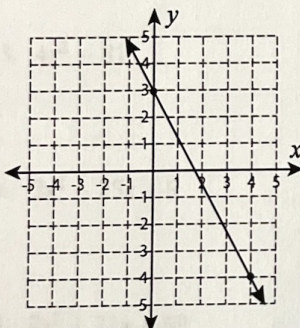
Slope = _____

3)



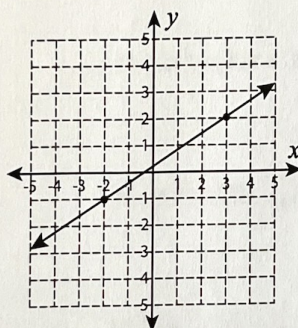
Slope = _____

4)



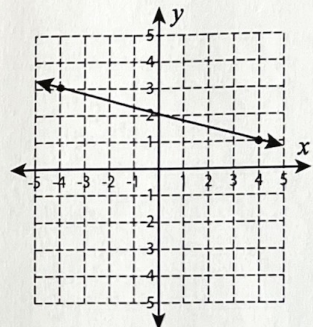
Slope = _____

5)



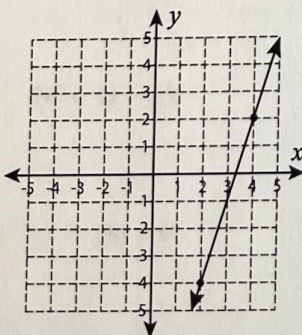
Slope = _____

6)



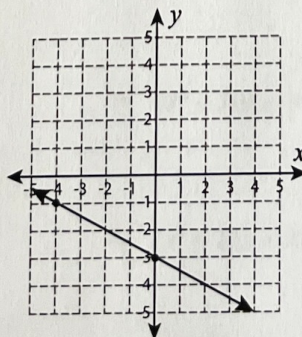
Slope = _____

7)



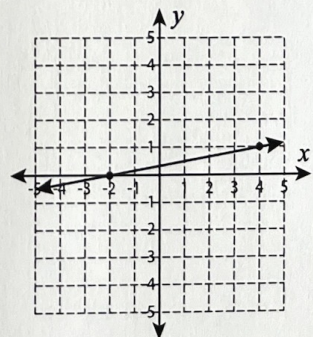
Slope = _____

8)



Slope = _____

9)



Slope = _____

Factoring Quadratic Expressions (A)

Name: _____

Date: _____

Factor each expression.

1. $3x^2 + 5x - 2$

11. $3x^2 - 20x - 32$

2. $4x^2 + 9x - 9$

12. $3x^2 - 11x - 4$

3. $4x^2 + 15x - 54$

13. $2x^2 + 23x + 63$

4. $2x^2 + 3x - 14$

14. $3x^2 - 20x - 7$

5. $4x^2 - 81$

15. $2x^2 + 21x + 27$

6. $3x^2 - 25x + 8$

16. $4x^2 - 25x + 25$

7. $2x^2 + 21x + 49$

17. $4x^2 - 5x - 6$

8. $3x^2 - 19x + 20$

18. $4x^2 - 16x - 9$

9. $4x^2 - 4x - 63$

19. $4x^2 + 20x + 9$

10. $3x^2 + 19x + 6$

20. $2x^2 + 21x + 40$



Read this excerpt from *The Good Earth*, a novel written by Pearl S. Buck. Then answer the questions that follow.

Pearl Sydenstricker Buck was born in 1892 in West Virginia but soon moved back to Zhenjiang, China, with her missionary parents. Raised by a Chinese nanny, Pearl learned Chinese tales and myths and could speak and write both English and Chinese by the age of four. Her daily interactions with the people of Zhenjiang taught Pearl a great deal about Chinese life and customs.

While Pearl traveled back to the United States for brief time periods, she spent most of the first forty years of her life in China. In 1917, Pearl and her husband John moved to a poor rural community in the Chinese province of Anhui. There Pearl observed the challenges and hardships faced by impoverished peasant-farmers. Later, during her writing career, Pearl was able to draw from a wealth of memories about China and its people.

from *The Good Earth*

by Pearl S. Buck

A hard-working peasant named Wang Lung labors long hours in his fields to feed his growing family. After years of fruitful harvests, however, a severe drought cripples the countryside, and all its inhabitants suffer as the crops wither and perish. Ultimately, the family's food stores are exhausted, the family ox is consumed, and they are starving. All that remains of Wang Lung's inheritance is his land, now just bleak, hardened fields. In this scene, Wang Lung senses the hopelessness building inside him; then he sees his uncle and two men come up to his house. How well-fed they look! Wang Lung all but accuses his uncle of being heartless enough to feed himself while his relatives are starving.

1 "I have thought of nothing but of you and of your father, who is my brother," retorted his uncle briskly, "and now I prove it to you. As soon as I could, I borrowed from these good men in the town a little food on the promise that with the strength it gave me I would help them to buy some of the land about our village. And then I thought of your good land first of all, you, the son of my brother. They have come to buy your land and to give you money—food—life!" His uncle, having said these words, stepped back and folded his arms with a flourish of his dirty and ragged robes.

2 Wang Lung did not move. He did not rise nor in any way recognize the men who had come. But he lifted his head to look at them and he saw that they were indeed men from the town dressed in long robes of soiled silk. Their hands were soft and their nails long. They looked as though they had eaten and blood still ran rapidly in their veins. He suddenly hated them with an immense hatred. Here were these men from the town, having eaten and drunk, standing beside him whose children were starving and eating the very earth from his fields; here they were, come to squeeze his land from him in his extremity. He looked up at them sullenly, his eyes deep and enormous in his bony, skull-like face.

3 "I will not sell my land," he said.

4 His uncle stepped forward. At this instant the younger of Wang Lung's two sons came creeping to the doorway upon his hands and knees. Since he had so little strength in these latter days the child at times had gone back to crawling as he used in his babyhood. . . .



5 “What is your price?” Wang Lung whispered at last. Well, there were these three children to be fed—the children and the old man. He and his wife could dig themselves graves in the land and lie down in them and sleep. Well, but here were these.

6 And then one of the men from the city spoke, a man with one eye blind and sunken in his face, and unctuously he said, “My poor man, we will give you a better price than could be got in these times anywhere for the sake of the boy who is starving. We will give you . . .” he paused and then he said harshly, “we will give you a string of a hundred pence for an acre!”

7 Wang Lung laughed bitterly. “Why, that,” he cried, “that is taking my land for a gift. Why, I pay twenty times that when I buy land!”

8 “Ah, but not when you buy it from men who are starving,” said the other man from the city. He was a small, slight fellow with a high thin nose, but his voice came out of him unexpectedly large and coarse and hard.

9 Wang Lung looked at the three of them. They were sure of him, these men! What will not a man give for his starving children and his old father! The weakness of surrender in him melted into an anger such as he had never known in his life before. He sprang up and at the men as a dog springs at an enemy.

10 “I shall never sell the land!” he shrieked at them. . . . “I will dig up the fields and feed the earth itself to the children and when they die I will bury them in the land, and I and my wife and my old father, even he, we will die on the land that has given us birth!”

1 Based on the text evidence, which statement **best** reflects the contrast between Wang Lung’s point of view and the city men’s?

- A** Wang Lung thinks his uncle is heartless, but the men are sure that his uncle really does have Wang Lung’s best interests in mind.
- B** Wang Lung thinks the men are taking advantage of him, but the men believe a starving man has no choice but to sell.
- C** Wang Lung thinks that the men from the city are soft, but they are convinced that peasants can be easily fooled.
- D** Wang Lung believes that his uncle’s proposal is unreasonable, but the men believe that Wang Lung is uncertain and slow to make decisions.



2

This question has two parts. Answer Part A, and then answer Part B.

Part A

Which sentence **best** expresses Wang Lung's point of view?

- A He is afraid of the men who come to buy his land.
- B He is certain that his land is the best in the area.
- C He is grateful that his uncle is trying to help him.
- D He is angry about the choice he is forced to make.

Part B

Which sentence from the text **best** supports the answer in Part A?

- A "He did not rise nor in any way recognize the men who had come."
- B "They looked as though they had eaten and blood still ran in their veins."
- C "Well, there were these three children to be fed—the children and the old man."
- D "... here they were, come to squeeze his land from him in his extremity."

3

Explain how the author's background is reflected in Wang Lung's response to the city men. Use at least **three** details from the text to support your answer.



Self Check

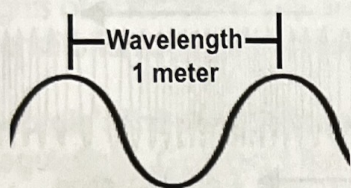
Go back and see what you can check off on the Self Check on page 120.

Waves: Velocity and Frequency

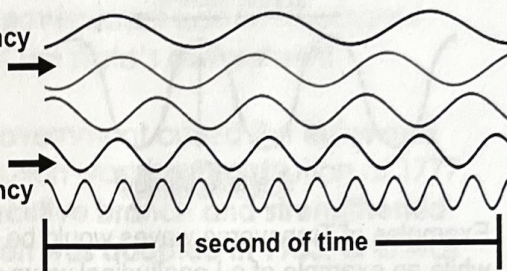
Name _____

Instructions: Read through the information below. Then complete the calculation problems at the bottom of the page.

The velocity of a wave can be calculated if you have enough information. First you need to know the *Wavelength*, or the length of one complete wave cycle. This could be measured Crest to Crest, Trough to Trough, or any other complete cycle of a wave. The second aspect you need is the wave *Frequency*, or the number of waves or vibrations produced per second. The frequency is measured in Hertz and the Wavelength is measured in meters.



Low Frequency
3 Hz



The equation for calculating the velocity of a wave is:

Velocity = Wavelength x Frequency

$$V = \lambda \times f$$

This equation works for any wave form, water, sound, or radio waves.

EXAMPLE: A wave as a Wavelength of 5 meters and a Frequency of 10 Hz.

What is its velocity?

$$V = 5 \times 10 \rightarrow$$

$$V = 50 \text{ meters per second}$$

Solve using the wave velocity equation: (Show your equation set up and math work)

1- A wave has a Wavelength of 12 meters and a Frequency of 10 Hz.

What is its velocity?

2- A wave has a Wavelength of 3 meters and a Frequency of 15 Hz.

What is its velocity?

3- A wave has a Wavelength of 18 meters and a Frequency of .5 Hz.

What is its velocity?

4- A wave has a Wavelength of .5 meters and a Frequency of 100 Hz.

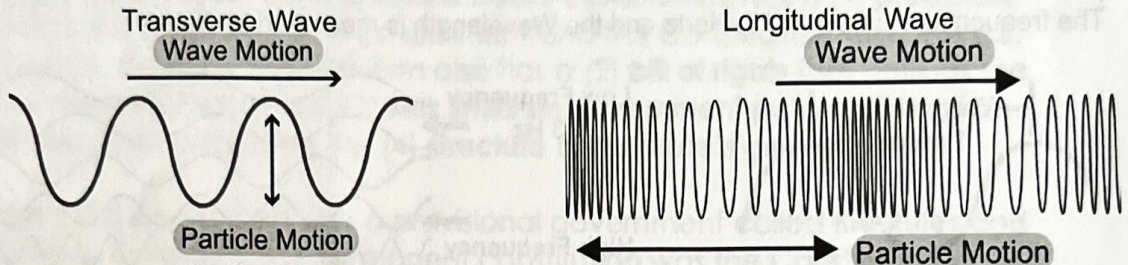
What is its velocity?

Waves: Introduction and Types

Name _____

Instructions: Read through the information below. Then complete the statements at the bottom of the page using the BOLD words from the page.

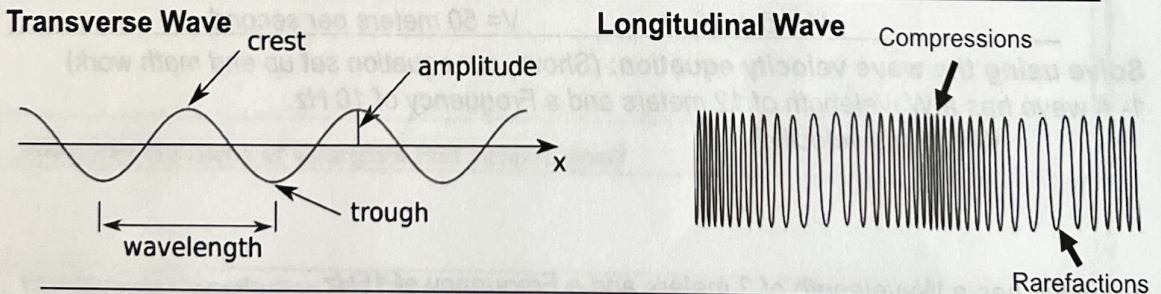
A wave is a transfer of energy through a medium from one point to another. Some examples of waves include; water waves, sound waves, and radio waves. Waves come in two different forms; a **Transverse** Wave which moves the medium *perpendicular* to the wave motion, and a **Longitudinal** Wave, which moves the medium *parallel* to the wave motion.



Examples of Transverse waves would be a vibrating guitar string or electromagnetic waves, while an example of a Longitudinal wave would be a "Slinky" wave that you push and pull.

Waves have several properties which are represented in the diagrams below. In a Transverse wave the **Crest** and Troughs are the locations of maximum displacement up or down. The **Amplitude** is the measurement of maximum displacement. The **Wavelength** is the distance of one complete wave cycle. For example; the distance from crest to crest or trough to trough would be 1 wavelength.

In a Longitudinal wave, areas of maximum displacement are known as **Compressions** and **Rarefactions**. The stronger the wave, the more compressed and spread out the wave medium becomes.



Fill in the statements using the BOLD words from the above information.

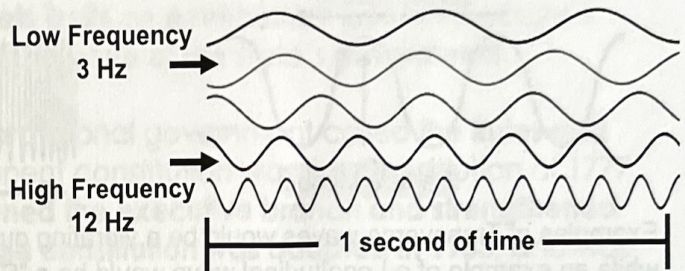
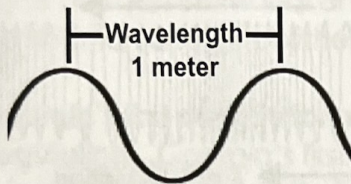
- 1- Wave motion that is Parallel to wave direction describes a _____ wave.
- 2- A _____ is the maximum upwards displacement in a Transverse wave.
- 3- One complete wave cycle is referred to as a _____.
- 4- Wave motion that is Perpendicular to wave direction describes a _____ wave.
- 5- A _____ or _____ is the maximum displacement in a Longitudinal wave.
- 6- An Ocean wave would be an example of a _____ wave.
- 7- The distance from one trough to another trough is called a _____.
- 8- The measurement of displacement is called a wave's _____.

Waves: Velocity and Frequency

Name _____

Instructions: Read through the information below. Then complete the calculation problems at the bottom of the page.

The velocity of a wave can be calculated if you have enough information. First you need to know the *Wavelength*, or the length of one complete wave cycle. This could be measured Crest to Crest, Trough to Trough, or any other complete cycle of a wave. The second aspect you need is the wave *Frequency*, or the number of waves or vibrations produced per second. The frequency is measured in Hertz and the Wavelength is measured in meters.



The equation for calculating the velocity of a wave is:

Velocity = Wavelength x Frequency

$$v = \lambda \times f$$

This equation works for any wave form, water, sound, or radio waves.

EXAMPLE: A wave as a Wavelength of 5 meters and a Frequency of 10 Hz.

What is its velocity?

$$V = 5 \times 10 \rightarrow$$

$$V = 50 \text{ meters per second}$$

Solve using the wave velocity equation: (Show your equation set up and math work)

1- A wave has a Wavelength of 12 meters and a Frequency of 10 Hz.

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3- A wave has a Wavelength of 18 meters and a Frequency of .5 Hz.

What is its velocity?

4- A wave has a Wavelength of .5 meters and a Frequency of 100 Hz.

What is its velocity?

GEORGIA STATE CONSTITUTION

PAGE 1

SS8CG1A: Explain the basic structure of the Georgia state constitution AND Compare to U.S. Constitution

A constitution establish the relationship between a government and its people. **Georgia's Constitution, like the United States Constitution,** has a (1) **preamble** that states the purpose of the government and the Constitution. Like the U.S. Constitution, Georgia's constitution also has a (2) **bill of rights** that outlines the rights of each individual and (3) **sets limits on government power**. Georgia's constitution also establishes the (4) **structure of the state's government**.

Georgia's first constitution was a provisional government called **the Rules and Regulations**. Georgia's first permanent constitution was the Constitution of 1777, a **form of government that weakened the executive branch and strengthened the legislature**. The current **Georgia constitution was adopted in 1983**, and was intended to be a shorter, **more modern constitution for the state**.

Directions: Use the textbox below to answer the following items:

1. What does a constitution establish?

2. What are similar between the Georgia and U.S. Constitution set up? (4 ways)

3. What was the name of Georgia's first constitution?

4. The Georgia Constitution of 1777 formed what type of government?

5. When did Georgia adopt its current Constitution AND what was the intention in rewriting the Constitution?

CHECKS AND BALANCES GEORGIA'S 3 BRANCHES PAGE 6

SS8CG1B Explain separation of powers and checks and balances

Like the government of the **United States**, Georgia's government is **divided into three parts/branches: the legislative, executive, and judicial**. Each has a different role to play. Each shares power with the others. Giving different branches of government different roles is called **separation of powers**. **Separation of powers makes sure that government does not become too powerful.**

The legislative branch is **made up of state representatives and senators**. These legislators **make the rules, or laws, that people must obey**. The **executive branch is headed by the governor**. The executive branch **enforces the laws**. If someone has been accused of breaking the law, **the judicial branch decides whether they are guilty or not guilty**. The courts also **interprets the laws and settles civil disputes**. The branch also acts as a go-between in cases of disagreement.

Directions: Use the textbox below to answer the following items in sentences:

1. How does Georgia's government and government of the U.S. divide power AND what is each part called?

2. What is it called giving different branches of government different roles/powers?

3. The separation of powers is used to stop what from happening?

4. What is the legislative branch made up of AND what do they make?

5. Who is the head of the executive branch AND what does the executive branch do?

6. If accused of breaking the law, what branch decides guilt or innocence AND interprets the laws?