

Vocabulary Four

Instructions

Take a look at the focus words below. Think about what each word means and how it is used. Then answer the questions after each word.

Remember: You *don't* have to understand every word in the example sentences.

Focus words: value, apply, examine, vector, correspond

I. value

1. This will set the **value** of the variable named doublevariable equal to 2.0.
2. Determine the **value** of the constant c that must be provided to solve the equation.
3. What is the maximum x **value** to use for plotting the graph?
4. What is the **value** of the angle a at which the pellet loses contact with the surface of the cylinder?
5. To avoid mistakes, this **value** should be called out as twenty, decimal (point), two, seven.
6. Since methane has higher percentage of hydrogen than butane, its caloric **value** is more.
7. Once that has been done, it then uses a SELECT to obtain a **value** for the WorkID **value**.

What do you think the word **value** means?

Look at the sentences below. Do you think **value** is being used correctly?

Circle your answer.

1. Find the **value** of ψ in the following equation.

yes

no

2. You will need to obtain a **value** for each item in the program.

yes

no

3. **Value** the variable in each step of the problem.

yes

no

4. The constant has more **value** to use on the graph.

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yes

no

5. This **value** is important for the experiment, so it should be determined carefully.

yes

no

6. What is the **value** of y at $t = 2.5$ seconds?

yes

no

Write a sentence that uses the word **value**. Use the examples above to guide you.

II. apply

1. The following restrictions **apply** to conversion operators:
2. How much force must they **apply** to a pop-out hatch, which is 1.22 m by 0.590 m, to push it out?
3. What force must you **apply** to cause the object to start moving?
4. If we **apply** the Bernoulli equation across streamlines from (4) to (5), we obtain the incorrect result.
5. We must **apply** the same amount of force at each location to produce a given acceleration.
6. The process can also be used to **apply** coatings of paint only to selected regions of a workpart.
7. We have already learned how to **apply** the laws of classical mechanics to the motion of particles.
8. If the slope is to be calculated, then **apply** a unit couple at the point on the beam where the slope is desired.

What do you think the word **apply** means?

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Look at the sentences below. Do you think **apply** is being used correctly?

Circle your answer.

1. You need to **apply** a force to the moving object in order to make it change its direction.

yes no

2. The rules do not **apply** to senior students.

yes no

3. **Apply** for the answer in the next equation.

yes no

4. It is best to **apply** the Pythagorean Theorem to find the solution.

yes no

5. You need **apply** of force to change the path of the bicycle.

yes no

6. Pull-up the lever, and then **apply** a clockwise twisting motion to it.

yes no

Write a sentence that uses the word **apply**. Use the examples above to guide you.

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III. examine

1. We also assume this it is okay for us to **examine** a real bicycle as we identify the various forces.
2. It is necessary to **examine** the structure of wood at three levels.
3. In this chapter we **examine** the mechanical properties of ceramics.
4. In this chapter we **examine** the adaptations evolved by plants and animals that allow survival under these environmental conditions.
5. We now **examine** the principles behind each hardening mechanism, and illustrate them by drawing examples.
6. Then, **examine** the data.
7. Let us **examine** the systems aspects of manufacturing.

What do you think the word **examine** means?

Look at the sentences below. Do you think **examine** is being used correctly?

Circle your answer.

1. **Examine** for making changes to the data.
yes no
2. It is important to **examine** the diagram carefully before you begin to work.
yes no
3. You will find it necessary of **examine** to the information in the program.
yes no
4. This is done in order to **examine** the changes that are made in each step of the design process.
yes no
5. Follow the **examine** and then explain your answers in the space below.
yes no
6. The doctor will now **examine** the x-rays.
yes no

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Write a sentence that uses the word **examine**. Use the examples above to guide you.

IV. vector

1. What is the crane's angular velocity **vector**?
2. No matter where the origin is chosen along the z axis, the angular velocity **vector** will be parallel to the axis.
3. What are the position **vector** and velocity **vector** of the point at $t = 3$ s?
4. The **vector** field in part (b) might describe the velocity at points on a rotating wheel.
5. We will usually write the magnitude of a **vector** mass point such as an electron.
6. It is a **vector** quantity and is therefore specified in terms of magnitude (size and associated unit) and a direction.
7. Forces of equal magnitude and opposite direction have a **vector** sum of zero.

What do you think the word **vector** means?

In examples 1, 3, 5 and 6, what part of speech is vector?

What about in examples 2, 4 and 7?

Look at the sentences below. Do you think **vector** is being used correctly?

Circle your answer.

1. Is velocity a **vector** or a scalar quantity?

yes

no

2. It is a **vector**, so we need to determine the direction, too.

yes

no

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3. Calculate the angular velocity **vector** for the particle that is shown in the diagram on page 213.
yes no
4. **Vector** of the direction before you start the experiment.
yes no
5. Write a routine that takes as input a **vector** of resistance values, and the two indicated voltages.
yes no
6. Write by **vector** on the program interface to see what the results will be.
yes no

Write a sentence that uses the word **vector**. Use the examples above to guide you.

V. correspond

1. What physical properties of a sound wave **correspond** to the sensations of pitch, loudness, and tone quality?
2. Which two of the following cases do not **correspond** to the behavior of an ideal gas?
3. The upper and lower limits of healthy weight range **correspond** to mass body indexes of 19 and 25.
4. The schedule dimensions so shown for Schedules 30 and 40 **correspond** to standard pipe.
5. Teflon is self-lubricating and its nonstick properties **correspond** to its very low coefficient of friction.
6. Assume the air properties **correspond** to those for the standard atmosphere.
7. What model depth will **correspond** to a depth of 80 cm in the full-sized tank?

What do you think the word **correspond** means?

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Look at the sentences below. Do you think **correspond** is being used correctly?

Circle your answer.

1. Find the value that **corresponds** to y in the graph in Figure 15.12.
yes no
2. **Correspond** your answers to the solutions.
yes no
3. The three curves **correspond** to different levels of damping.
yes no
4. The heat (Q) and work (W) terms in the energy balance **correspond** to transfer of energy without the transfer of material across the system.
yes no
5. What does the variable **correspond** for in this problem?
yes no
6. You will need to find the points on the two charts that **correspond** to each other.
yes no

Write a sentence that uses the word **correspond**. Use the examples above to guide you.

VI. Writing practice

Choose **three** of the focus words and use them in a short paragraph.

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VII. Look at the example sentences. What words come before and after each of the focus words? Put each word in a suitable category.

before the focus word	value	apply	examine	vector	correspond
noun					wave
verb					
preposition					
article					
other word types					

after the focus word	value	apply	examine	vector	correspond
noun					
verb					
preposition					to
other word types					

Are there any patterns that you notice? Click [here](#) to see more examples of the focus words in use.

What does the pattern tell you about how the focus word is used?

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VIII. Do the focus words have any other parts of speech? Complete the table. Not all focus words have all parts of speech that are shown in the table.

	value	apply	examine	vector	correspond
noun					
verb					
adjective	valuable				
adverb					