

1. The word “considerable” is a synonym for “abundant” or “significant.” What are three words that would serve as antonyms for “considerable”?

2. Replace the underlined word “ambitious” with each of the following words. Which one is the closest synonym?

- (A) Severe
- (B) Uncomplicated
- (C) Bold
- (D) Pretentious

3. If you were to replace the underlined word “authority” with each of the following words, which one would reverse the meaning of the sentence, making it the most likely antonym?

- (A) Sovereignty
- (B) Supremacy
- (C) Inferiority
- (D) Dominance

4. What are three other words that could be used in place of “artificial” and retain the same meaning of the sentence? (Remember the context of the sentence when choosing your synonyms!)

5. “Destroyed” has a generally negative tone. Using your knowledge of vocabulary and your understanding of whether a word sounds positive or negative, circle the three most likely synonyms of “destroyed” from the following list.

- (A) Demolished
- (B) Supplemented
- (C) Eradicated
- (D) Restored
- (E) Protected
- (F) Obliterated

6. “Accomplishments” is a word with a generally positive tone. Therefore, its antonyms would have a generally negative tone. Using your knowledge of vocabulary and intuition about tone, which of the following are antonyms of the word “accomplishments”? Circle all that apply.

- (A) Achievements
- (B) Triumphs
- (C) Failures
- (D) Forfeits
- (E) Defeats
- (F) Efforts

Identifying Details

Identifying details questions focus on specific areas of a passage. These questions may ask you to identify specific evidence, identify true statements, identify basic facts, or infer a point from specific evidence.

Identifying details questions are often introduced with the following prompts:

- According to the second paragraph...
- Which statement is *true* according to the passage?
- According to the passage...
- The author states in the passage...
- The phrase in lines 32-33 refers to...
- In lines 7-9, the author characterizes X as being...

You will typically be able to **prove** identifying details questions by locating the relevant context area of the passage and rereading for the detail in question. Oftentimes the correct answer is clearly stated in the text and can easily be identified and underlined.

Most people know Beatrix Potter as the author of popular children's books about the adventures of various animals, such as her most famous offering, Peter Rabbit. But she was also a perceptive scientist whose research is well respected today. In Potter's lifetime, however, few women worked as scientists because societal norms restricted the number of professions available to women.

During the Victorian era, when Potter lived, women were expected to be wives and mothers and not to work. For this reason, Potter's parents were alarmed when their teenage daughter announced her intention to be a scientist. In order to discourage her, Potter's parents stopped her education and had her take over responsibility for their household.

In defiance, Potter continued her scientific studies on her own. She even kept a journal recording her observations and experiences written in code so that her parents couldn't understand it. This code was not deciphered until many years after her death.

In recognition of her scientific talent, one of Potter's uncles tried to enroll her at the Royal Botanical Gardens as a botany student. The school rejected Potter because she was female. One of her papers on the germination of spores was accepted by a scientific society, but her uncle had to read it to the society for her because women were not allowed to attend the meetings. After Potter's death, the society offered her a formal apology for having barred her.

Exercises

1. The author states that contents of Potter's journal
 - (A) were written in a language that no one understands.
 - (B) were donated to the Royal Botanical Gardens.
 - (C) were transparent and meaningful to all who read them.
 - (D) could not be read by her parents.
 - (E) contained observations essential to advancing the study of botany.
2. According to the passage, which of the following statements are true?
 - I. Potter's uncle encouraged her to pursue writing in addition to science.
 - II. Women were not permitted to attend scientific society meetings.
 - III. The Royal Botanical Gardens posthumously offered Potter a formal apology.
 - (A) I only
 - (B) II only
 - (C) I and II only
 - (D) III only
 - (E) None of the above

Exit Quiz

1. Which of the following correctly shows the mode(s) of the list of numbers below?

1, 1, 2, 3, 5, 5, 5, 8, 8, 8, 13

- (A) 1 only
 (B) 5 only
 (C) 8 only
 (D) 5 and 8 only
 (E) 1, 5, and 8

2. The data set below represents students' scores on Ms. Fry's statistics test. Which of the following is the median test score?

{62, 71, 77, 78, 78, 84, 85, 92, 94, 99}

- (A) 37
 (B) 78
 (C) 81
 (D) 82
 (E) 84

3. What is the average (arithmetic mean) of 4, -10, -2, 3, and 0?

- (A) -5
 (B) -4
 (C) -2
 (D) -1
 (E) $\frac{17}{5}$

4. Marcus went running 20 times in the last month. The table below shows the distances of his runs and the number of times he ran each distance. Based on the information provided, what is the range of the distances of his runs?

Marcus's Runs

Distance (miles)	Number of times
3.1	2
4.2	5
6.4	8
10.2	4
12.8	1

- (A) 6.4
 (B) 7.0
 (C) 9.7
 (D) 12.8
 (E) 13.2

5. The table below shows the price of a breakfast sandwich at various fast food restaurants in Seville. Based on the information provided, what is the difference between the median price and the mean price of a breakfast sandwich?

Price	Restaurants
\$2.49	1
\$2.69	2
\$2.79	5
\$2.89	8
\$2.99	8

- (A) \$0.00
 (B) \$0.01
 (C) \$0.02
 (D) \$0.10
 (E) \$0.50

Graphing Linear Equations

In the Real World	Number Talk
<p>A graph can allow you to visualize the relationship between two variables in an equation. It is an important tool in making equations easier to understand.</p> <p>Using the coordinate plane can help you see ordered pairs, slopes, intersections, and other important features of an equation. Graphing the relationship between the independent variable and the dependent variable can show trends that may be hard to see in an equation such as the results from a scientific experiment, a company's profit margins, or the progress an athlete has made lifting weights over time.</p>	<p>Determine if the slopes of the following equations are closer to $\frac{1}{2}$, 1, or 2:</p> $y = x - 8$ $2y - 6 = x$ $3y = 8x + 3$

Warm-Up

1. What are two points on the line $y = 3x + 4$?
2. What is the slope of the line $y = 3x + 4$?
3. Write an equation for a line perpendicular to the line $y = 3x + 4$.
4. Graph the line $y = 3x + 4$. How would the graph change if you doubled the slope? Graph that line as well.

