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Pretest

Directions: Read the passage, and then follow the directions for problems 1 and 2.

I woke up this morning at 7:30 a.m. on May 9, 2021. Now it’s April 14, 1865, and I don’t know the time because my smart watch doesn’t get a signal here. Somewhere in between I had received a call from Dr. Muñoz that he was finally able to create a generator for the time machine to recharge it before return trips—a situation that needed to be overcome to travel to the times before the advent of electricity. As a result, Dr. Muñoz could finally attempt his greatest feat, the prevention of Abraham Lincoln’s assassination. Well, I could attempt this feat, a very frightening prospect that I possibly should have considered before signing up to do my required school community service hours by working as a test subject at the local university. Nevertheless, here I am in 1865, which has a decidedly different smell. I think it is all the horses. I had donned appropriate clothing for the time period and conducted a cursory review of the general vernacular of the period—that means the normal stuff people tended to say, I had learned before my half-hour cram session on 1860s-talk. (Yes, I know, I should have been studying for this mission all along, but I put it off and ended up unprepared.) Still, I feel like an alien here, and I am pretty sure people can tell I am an outsider. That is a problem because I have about 36 hours to prove I am an insider so people would trust me when I warn them of a threat to the president’s life.

1a. In which genre does the passage belong?
   A  nonfiction
   B  poetry
   C  science fiction
   D  folklore

1b. Use evidence from the text to support your answer above.

___________________________________________________________________________________________
___________________________________________________________________________________________
___________________________________________________________________________________________
___________________________________________________________________________________________
___________________________________________________________________________________________
___________________________________________________________________________________________
2a. What is the meaning of the word *cursory* as used in the passage?
   A  brief
   B  thorough
   C  boring
   D  timely

2b. What context clues did you use to determine the answer above?

___________________________________________________________________________________________
___________________________________________________________________________________________
___________________________________________________________________________________________
___________________________________________________________________________________________
___________________________________________________________________________________________

3. Choose the sentence that uses quotation marks correctly.
   A  “We need to take action to save the planet,” said Thomas, “And we need to do it now.”
   B  “We need to take action to save the planet,” said Thomas, “and we need to do it now.”
   C  “We need to take action to save the planet, said Thomas, and we need to do it now.”
   D  “We need to take action to save the planet” said Thomas “and we need to do it now.”

4. Rewrite this sentence using correct capitalization and punctuation:
   **kim grace and zoey are going on a trip to washington dc**
Every place on Earth has a climate, or typical seasonal weather patterns. Some years, weather might differ slightly from a typical climate—for example, it could be hotter, colder, rainier, or drier than normal. Unusual weather patterns for several years, however, are evidence of climate change. Climate change has far-reaching consequences, from an increased likelihood of natural disasters to the destruction of various plant and animal homes.

Unfortunately, climate change is largely caused by human activity. Humans burn fossil fuels—such as coal, oil, and gas—to get energy to power vehicles and buildings. The burning of fossil fuels causes harmful gases to be trapped in the air. Trees and oceans can clean the air of these gases, but they can’t keep up because humans are releasing the gases too quickly. Deforestation, or the clearing of trees to prepare land for other use, also means there aren’t as many trees on Earth to do the job of cleaning the air. As a result, the planet is left with too many harmful gases. These gases are called greenhouse gases because when they get trapped in the air, they create a wet, warm enclosed area like a greenhouse.

Making Earth into a hot greenhouse creates big problems. One problem is the melting of ice sheets in the Arctic region. As the ice melts, the ocean level rises, putting some cities at risk for flooding and harming animal and plant life. Some animals and plants could become extinct, meaning they no longer exist on Earth, and that sets off a chain reaction for other animals who eat or are eaten by those animals.

5. What was most likely the author’s purpose in writing this text?
   A to persuade
   B to entertain
   C to inform
   D to describe

   Cause: ____________________________________________________________________________
   Effect: ____________________________________________________________________________
   Cause: ____________________________________________________________________________
   Effect: ____________________________________________________________________________

7. Which of these sentences uses a subordinating conjunction? Mark all that apply.
   A  I will go running, even if I have to go in the rain.
   B  The baseball team won yesterday, and the basketball team lost.
   C  Nobody likes going to the dentist, but it’s important to get regular dental checkups.
   D  Even though I overslept, I still made it to school on time.
   E  Jorge decided to order the clothes online, rather than drive all the way to the store.
   F  She had homework in English, social studies, and math.
   G  Chloe’s mom told her they could not get a dog unless Chloe agreed to walk it twice a day.
   H  It is always wise to study for a test, even if you feel confident about the material.
   I  “We should divide the group project into sections,” Brianna noted, “so that we can each work on a different part.”
Directions: Read the passage, and then follow the directions for problems 8 and 9.

An excerpt from the United States Department of Labor publication, Child Labor Facts and Figures (1933)

“Although the number of steady year-round workers under 10 years of age is not large, and although statistics for this group are not available, it is known that considerable numbers are intermittently employed in agriculture, in newspaper selling, and in other street trades, and in industrial home work. It is certainly undesirable that these young children should spend long hours at exhausting or demoralizing occupations. Some idea of the extent of employment of children under 10 can be gained from special studies made in widely scattered areas. Twenty-four percent of the child workers found on 8 crops in 2 series of studies of children in agriculture made in the early 1920’s were younger than 10 years, and the work at which they were employed was often found to involve excessive fatigue and physical strain. …Many young boys sell newspapers until late at night and sometimes sleep in the newspaper distributing rooms. The numbers of very young children in industrial home work are difficult to determine, but certain studies have revealed a large proportion under 10....”

8a. Which of the following are main ideas of the passage? Select two.

A  Information from various studies has shown that a significant number of child laborers are under 10, though it is hard to know the exact number.

B  In some families, all the children need to work to support their families.

C  Delivering newspapers late at night allows young boys to go to school all day and still work to help their families.

D  Most child laborers work on farms.

E  Although child labor is not as significant of a problem in the 1930s as it was at the turn of the 20th century, there are still not enough laws to prevent children from working.

F  It is unfortunate that often children are employed in jobs that are unsafe, tiring, or physically grueling.

8b. Choose one of the main ideas you selected in problem 8a. List two quotations from the article that provide text evidence to support the main idea.

• ____________________________________________

• ____________________________________________
Pretest (cont.)

9. Read the simple sentences about child labor. Combine them to write one complex sentence.

Children who are working can’t go to school. They may get injured on the job. They don’t have time to play. All these things are harmful to the child. They are also harmful to society.

______________________________
______________________________
______________________________

10a. Which of these are sentence fragments? Choose all that apply.

A  The dog barked loudly.
B  Some of us from school.
C  A very big group of protestors at the state capitol.
D  Grew so large it outgrew the container.
E  Yesenia emailed her teacher.
F  Look out!
G  We all heard Mr. Sanchez say that.
H  Worked hard to get to the state championships.

10b. Rewrite each sentence fragment as a complete sentence.

______________________________
______________________________
______________________________
______________________________

Directions: Solve each problem.

11a. Grocery Store A sells a 5-pound bag of potatoes for $2.00. What is the price of each pound of potatoes?

A  $0.20  C  $2.00
B  $0.40  D  $10.00
11b. If Grocery Store B sells a 10-pound bag of potatoes for $3.80, which store should you shop at (A or B) to get a better price per pound of potatoes? Explain your answer.

___________________________________________________________________________________________
___________________________________________________________________________________________
___________________________________________________________________________________________

12. Shape 2 is a scale drawing of Shape 1. Fill in the missing side lengths.

![Diagram of shapes]

side $a$: _______ ft.  side $d$: _______ ft.
side $b$: _______ ft.  side $e$: _______ ft.
side $c$: _______ ft.  side $f$: _______ ft.

13. Find the volume of the cylinder. Use the formula $V = \pi r^2 h$, where $\pi = 3.14$.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>120 m³</td>
</tr>
<tr>
<td>B</td>
<td>376.8 m³</td>
</tr>
<tr>
<td>C</td>
<td>942 m³</td>
</tr>
<tr>
<td>D</td>
<td>3,768 m³</td>
</tr>
</tbody>
</table>

14. Use the function $f(x) = 5x - 2$ to complete the values in the table.

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>$f(2)$</td>
<td></td>
</tr>
<tr>
<td>$f(-3)$</td>
<td></td>
</tr>
<tr>
<td>$f(\frac{1}{2})$</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
</tr>
<tr>
<td>$-7$</td>
<td></td>
</tr>
</tbody>
</table>
15a. A shared-ride service charges customers $2 per mile, plus a flat fee of $1. During busy times, the service charges 4 times as much. Michael pays $36 for a ride during a busy time. Which equation could Michael use to figure out how many miles his trip was?

A) 4(2x + 1) = 36  
B) 8x + 1 = 36  
C) 2x + 1 = 36  
D) 2(4x + 1) = 36

15b. Solve for x to find out how many miles Michael’s trip was.

x = ________ miles

16a. A classroom has a set of 20 books. Each student is assigned a different book to read each week. Here is an arrangement of the books by genre. Use the image of the books to complete the table:

<table>
<thead>
<tr>
<th>Genre</th>
<th>Total Books in Genre</th>
<th>Probability of Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biography</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fantasy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Historical Fiction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modern Fiction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonfiction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science Fiction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biography</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fantasy</td>
<td></td>
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<tr>
<td>Historical Fiction</td>
<td></td>
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<tr>
<td>Modern Fiction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonfiction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science Fiction</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16b. How many total books are based on true facts? ________ books

16c. What is the probability of getting assigned a book based on true facts? ________

16d. How many books are fictional? ________ books

16e. What is the probability of getting assigned a book that is fictional? ________
17. What transformation is shown below?

- A reflection
- B rotation
- C transition
- D translation

18. Solve for each variable in the unknown angle measures.

18a. \( x = \) __________

18b. \( y = \) __________

18c. \( z = \) __________
19. Amir plants a tree that is 4 m tall. The tree’s trunk makes a right angle with the ground. He wants to tie down his tree with a rope, tied to the ground 3 m from the tree’s base. Use the Pythagorean Theorem to find how long the rope should be.

![Diagram of a tree with a rope tied to the ground]

The rope should be _______ m long.

20. Write each product in scientific notation.

20a. \((3.4 \times 10^5) \cdot (6.5 \times 10^2) = \)  

20b. \((6.6 \times 10^3) \cdot (1.2 \times 10^5) = \)  

20c. \((1.3 \times 10^9) \cdot (2.6 \times 10^{10}) = \)
Directions: Read the passage, and then follow the directions for problems 1–3.

The Dreams
By Eugene Field

Two dreams came down to earth one night
From the realm of mist and dew;
One was a dream of the old, old days,
And one was a dream of the new.

One was a dream of a shady lane
That led to the pickerel pond
Where the willows and rushes bowed themselves
To the brown old hills beyond.

And the people that peopled the old-time dream
Were pleasant and fair to see,
And the dreamer he walked with them again
As often of old walked he….

The other dream ran fast and free,
As the moon benignly shed
Her golden grace on the smiling face
In the little trundle-bed.

For ’t was a dream of times to come—
Of the glorious noon of day—
Of the summer that follows the careless spring
When the child is done with play.

And ’t was a dream of the busy world
Where valorous deeds are done;
Of battles fought in the cause of right,
And of victories nobly won….

But ’t was a dream of youthful hopes,
And fast and free it ran,
And it told to a little sleeping child
Of a boy become a man!

These were the dreams that came one night
To earth from yonder sky;
These were the dreams two dreamers dreamed—
My little boy and I.

And in our hearts my boy and I
Were glad that it was so;
He loved to dream of days to come,
And I of long ago.

1. What is the central theme of this poem?

A  It is up to the young to fight the battles they inherited from older generations.

B  The past is comforting and familiar, while the future is unknown and scary.

C  A dream can be both frightening and inspiring at the same time.

D  The young dream of the future, while the old dream of the past.
2. What is the meaning of the word **valorous**?
   - A) tired
   - B) brave
   - C) familiar
   - D) undiscovered

3. Explain the metaphor in the following stanza:

   For ’t was a dream of times to come—
   Of the glorious noon of day—
   Of the summer that follows the careless spring
   When the child is done with play.

   ___________________________________________________________
   ___________________________________________________________
   ___________________________________________________________
   ___________________________________________________________

4. Underline the subject in each sentence, then fill in the correct verb.

4a. Ana and her brother __________________________ to Crestview High School. (go / goes)

4b. Both of my cats ______________________________ that brand of cat food. (like / likes)

4c. One of my friends ______________________________ to study chemistry in college. (want / wants)

4d. Every Friday in gym class, the students __________________________ to run a mile in under 10 minutes. (try / tries)

5. Use each book summary to determine the book’s genre.

5a. This book is about a family in New York struggling to get by after both parents lose their jobs during the Great Depression. The family experiences events that real people experience, but the actual characters weren’t real people who actually lived.
   - A) biography
   - B) historical fiction
   - C) fantasy
   - D) science fiction
5b. This book explains the historical factors that led to the Great Depression and gives statistics about unemployment rates during the 1930s.

- A  contemporary fiction
- B  poetry
- C  historical fiction
- D  nonfiction

5c. Explain the difference between the genres you identified in 5a and 5b.

Directions: Read the first paragraph of Maleek’s argumentative essay. Then, follow the directions for problems 6–8.

**Trees Over Trucks**

By Maleek Hamdan

Would you rather breathe fresh, clean air or disgusting truck fumes? While the answer seems obvious, our town is having a debate over just that issue. We have a large vacant lot, and the city council wants to turn it into a distribution center that would be filled with trucks all day and night. Others would rather see the area turned into a park, with a playground, trees, and plenty of grassy fields to run through. The park is absolutely the better option for this empty space. Parks provide badly needed clean air, help people become healthier through exercise, and promote a sense of community for those who use them.

6. Which of these sentences is Maleek’s thesis statement?

- A  “While the answer seems obvious, our town is having a debate over just that issue.”
- B  “We have a large vacant lot, and the city council wants to turn it into a distribution center that would be filled with trucks all day and night.”
- C  “The park is absolutely the better option for this empty space.”
- D  “Parks provide badly needed clean air, help people become healthier through exercise, and promote a sense of community for those who use them.”
7. Which of the following is likely to be Maleek’s topic sentence for his first body paragraph?

A  “Parks are necessary to provide clean air to our badly struggling environment.”

B  “Both children and adults love to play in parks.”

C  “A distribution center would be an annoyance because it would be loud and the trucks would crowd our roads.”

D  “The city council should consider that a park will make our community healthier physically and provide social benefits as well.”

8. Suppose Maleek includes this piece of evidence in his paragraph about the benefits of trees to the environment:

According to the Arbor Day Foundation, trees can help improve air quality and human health by removing air pollution.

Which of these sentences would be the most effective reasoning to follow this evidence?

A  “The distribution center, on the other hand, would create more air pollution.”

B  “A park would bring more trees to our community, so it is clearly a better choice in a town where the health of people and the planet should be our first priorities.”

C  “If the distribution center were to plant trees around their perimeter, maybe we could still get the benefits of clean air, making the distribution center a little bit better.”

D  “In addition, many people use the park for exercise—such as running, walking, or riding bikes—and exercise is equally important for human health.”
Directions: Read the passage. Then follow the directions for problems 9 and 10.

Your heart races. Your muscles tighten. Your hands feel cold. You feel as if you’re being chased by a predator, when really you’re just about to take a big math test. Why do our bodies react this way to stress?

Well, it’s because your body really thinks you’re being chased by a predator. Think about the animal kingdom. Let’s say somewhere on a savanna, a lion approaches a zebra. The zebra is, understandably, very anxious. It really has only two choices: fight the lion or run away. This set of options is referred to as “fight or flight,” and it causes the zebra’s brain to trigger a series of reactions in the zebra’s body. The zebra’s heart rate quickens so it will pump more blood to its body to help it fight or run away. Its muscles tense to be prepared for battle or retreat.

The same reactions happen with people. In any stressful situation, your brain sends messages to your body to prepare for fight or flight. The messages cause the body to produce a chemical called adrenaline, which activates your body to run or fight. You have the same racing heart and tense muscles as that zebra. Your thoughts may race because your body wants you to be a quick thinker when you have to fight or flee. Your hands may be cold because blood has flowed away from them and into your muscles. Why does your stomach hurt? Blood may have flowed away from it, too—a dangerous chase is no time to think about food and digestion!

Fortunately, you can help your brain calm down from this terrified response, and your body will follow. Taking a few deep breaths sends a signal to your brain to calm down, and your body will calm down as a result. So, the next time you’re being chased by that predator disguised as a math test, just breathe.

9. Write a summary of this passage. Your summary should be 5–6 sentences.

___________________________________________________________________________________________
___________________________________________________________________________________________
___________________________________________________________________________________________
___________________________________________________________________________________________

10. Underline one prepositional phrase in each of these sentences from the text.
10a. You feel as if you’re being chased by a predator, when really you’re just about to take a big math test.
10b. Its muscles tense to be prepared for battle or retreat.
10c. Your hands may be cold because blood has flowed away from them and into your muscles.
11. A grocery store lets each of its customers spin a prize wheel. The table shows the results of the first 50 customers’ spins.

<table>
<thead>
<tr>
<th>Results of First 50 Spins</th>
</tr>
</thead>
<tbody>
<tr>
<td>$5 off coupon</td>
</tr>
<tr>
<td>$10 off coupon</td>
</tr>
<tr>
<td>cookie</td>
</tr>
<tr>
<td>hat</td>
</tr>
<tr>
<td>T-shirt</td>
</tr>
</tbody>
</table>

11a. Based on the results, if 50 more people spin the wheel, how many people would you expect to get a cookie? ________________

11b. Based on the results, what is the probability of getting something to wear? Express as a number between 0 and 1. ________________

11c. Based on the results, how many times would you expect the next 200 customers to get any type of coupon? ________________

12. A garden store wants to fill the following containers with mulch. Find the volume of each container.

12a. volume of cube-shaped container: ________________

12b. volume of rectangular prism-shaped container: ________________

13. A school carnival charges a $5 entrance fee. Inside the carnival, tickets for food and attractions are sold for $2 each.
13a. Write an equation for the total cost of a carnival trip. Use \( x \) to represent tickets and \( y \) as the total cost.

13b. Complete the table using values for \( x \) and \( y \). Then, graph the results.

<table>
<thead>
<tr>
<th>( x )</th>
<th>( y )</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

13c. Using the table or graph, figure out the value of \( y \) when \( x = 4 \).  

14. Solve for each variable.

14a. \( 3(2x + 4) = 7x + 9 \)  
14b. \( \frac{2}{3}(6n - 9) = 3n + 1 \)

15a. Jing rides her bike in a 28-mile bike race. The race starts at 9:15 a.m. Jing rides 8 miles per hour. What time will Jing finish the race? 

15b. Jing’s friend Rosa starts the race 15 minutes after Jing, but finishes at the same time. What was Rosa’s speed, rounded to the nearest tenth? 

16. Lines WX and YZ are parallel. Angle ZNB measures 30º. Label the other angle measures.
17. Find the solution to the system of equations.

\[ 2x + 4y = 26 \quad y = x + 2 \]

A (2, 6)  
B (3, 5)  
C (1, 4)  
D (5, 3)

18a. Circle one. \( \sqrt{62} \) is: rational  irrational

18b. \( \sqrt{62} \) lies between the integers _________ and _________.

18c. Indicate the approximate location of \( \sqrt{62} \) on this number line.

19. How long would it take a plane to get from Point A to Point B if it flew at 13 miles per minute?

A 10 minutes  
B 13 minutes  
C 15 minutes  
D 19 minutes

20. Write each number in scientific notation.

20a. 23,000,000

20b. 5,600

20c. 0.003

20d. 0.657
1a. C

1b. Possible answer: The story mentions that the narrator is traveling through time, saying they woke up in 2021 and now it's 1865, as well as that they volunteered for an experiment to go back in time. Since time travel is a common theme in science fiction, the genre of this passage is science fiction.

2a. A

2b. Possible answer: The narrator mentioned that they only studied for 30 minutes, even though they should have studied longer, and that they felt unprepared. Those context clues help me figure out that *cursory* means "brief."

3. B

4. Kim, Grace, and Zoey are going on a trip to Washington DC. (It would also be correct to have Washington, DC. Further, it would also be correct to have Washington, D.C.)

5. C

6. Possible answers:
   - **Cause:** Humans burn fossil fuels for energy.
   - **Effect:** Fossil fuels get trapped in the air, creating a situation like a hot, wet greenhouse.
   - **Cause:** Earth is hotter.
   - **Effect:** Ice sheets in the Arctic region are melting.

7. A, D, E, G, H, I

8a. A, F

8b. Possible answers: For main idea (F):
   - "It is certainly undesirable that these young children should spend long hours at exhausting or demoralizing occupations."
   - “… the work at which they were employed was often found to involve excessive fatigue and physical strain.”
   - "Many young boys sell newspapers until late at night and sometimes sleep in the newspaper distributing rooms."

9. Possible answer: Child labor is harmful to both children and society because children who work can't go to school, may get injured, and don't have time to play.

10a. B, C, D, H

10b. Possible answers:
   - B Some of us from school are going to get ice cream later.
   - C A very big group of protesters gathered at the state capitol.
   - D My plant grew so large it outgrew the container.
   - H The chess team worked hard to get to the state championships.

11a. B

11b. You should buy the 10-pound bag to get a better price per pound of potatoes. Each pound of potatoes in the 5-pound bag is $0.40 per potato, while each pound of potatoes in the 10-pound bag is only $0.38.

12. side a: 3 ft.; side b: 4 ft.; side c: 1 ft.; side d: 3.5 ft.; side e: 2.5 ft.; side f: 3 ft.

13. C

14.

<table>
<thead>
<tr>
<th>f(x)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
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<td>−17</td>
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<td>f(4)</td>
<td>18</td>
</tr>
<tr>
<td>f(½)</td>
<td>−1</td>
</tr>
<tr>
<td>f(−1)</td>
<td>−7</td>
</tr>
</tbody>
</table>

15a. A

15b. 4 miles

16a.

<table>
<thead>
<tr>
<th>Genre</th>
<th>Total Books in Genre</th>
<th>Probability of Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biography</td>
<td>1</td>
<td>0.05</td>
</tr>
<tr>
<td>Fantasy</td>
<td>6</td>
<td>0.3</td>
</tr>
<tr>
<td>Historical Fiction</td>
<td>6</td>
<td>0.3</td>
</tr>
<tr>
<td>Modern Fiction</td>
<td>2</td>
<td>0.1</td>
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<tr>
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<td>2</td>
<td>0.1</td>
</tr>
<tr>
<td>Science Fiction</td>
<td>3</td>
<td>0.15</td>
</tr>
</tbody>
</table>

16b. 3 books

16c. 0.15

16d. 17 books

16e. 0.85

17. B

18a. x = 2

18b. y = 6

18c. z = 5

19. 5 m

20a. $2.21 \times 10^5$

20b. $7.92 \times 10^8$

20c. $3.38 \times 10^{19}$
1. D
2. B
3. Possible answer: The metaphor compares young adulthood to both noontime in the day and the summer. Both are seen as high points.
4a. Ana and her brother go to Crestview High School.
4b. Both of my cats like that brand of cat food.
4c. One of my friends wants to study chemistry in college.
4d. Every Friday in gym class, the students try to run a mile in under 10 minutes.
5a. B
5b. D
5c. Possible answer: While historical fiction may include real-life events as part of the plot, it is not about real people who actually lived. Nonfiction is true and tells the stories of real people and events.
6. C
7. A
8. B
9. Possible answer: Human beings feel certain responses to stress because of the fight or flight response. The fight or flight response is an automatic response that happens in your body in response to a stressor, and it means your brain perceives the stressor as a dangerous predator that you either need to fight or run away from. Your whole body sets itself up to think fast and be strong for the fight or flight, which means your heart is beating fast to pump blood to your muscles and brain and the rest of your body gets less blood. You can help your brain calm down from this response by taking a few deep breaths. Deep breaths send a message to your brain to slow down, and your body will slow down as a result.
10a. You feel like you’re being chased by a predator, when really you’re just about to take a big math test.
10b. Its muscles tense to be prepared for battle or retreat.
10c. Your hands may be cold because blood has flowed away from them and into your muscles. (Note: students only need to underline one prepositional phrase.)
11a. 7 people
11b. 0.44
11c. 84 times
12a. 1,000 ft.³
12b. 400 ft.³
13a. \[ y = 2x + 5 \]
13b.

<table>
<thead>
<tr>
<th>( x )</th>
<th>( y )</th>
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<tbody>
<tr>
<td>0</td>
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</tr>
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<td>6</td>
<td>17</td>
</tr>
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<td>7</td>
<td>19</td>
</tr>
</tbody>
</table>
13c. \( y = 13 \)
14a. \( x = 3 \)
14b. \( n = 7 \)
15a. 12:45 p.m.
15b. 8.6 mph
16. \( m \angle ZNM = 150^\circ; m \angle MNY = 30^\circ; m \angle AMW = 30^\circ; m \angle BNY = 150^\circ; m \angle AMX = 150^\circ; m \angle WMN = 150^\circ; m \angle XMN = 30^\circ \)
17. B
18a. irrational
18b. 7 and 8
18c.

19. B
20a. \( 2.3 \times 10^7 \)
20b. \( 5.6 \times 10^1 \)
20c. \( 3.0 \times 10^{-3} \)
20d. \( 6.57 \times 10^{-1} \)