

Pretest

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

Mitchell couldn't sleep. The atmosphere in his room felt almost electric, and he sensed the same electricity inside himself too. This was his last slumber in his creaky childhood bed because in the morning he was departing for university life.

He was so excited that he was beginning a new experience in a new location. His hometown wasn't negative or unpleasant; it was just predictable and stale. He resided in the same house, with the same inhabitants, and he even had the same best friend since preschool. Everything was always the same, and nothing unexpected ever happened. The wait to get to his dorm, meet new people, and go on new adventures with them was unbearable.

Morning finally arrived, so the family loaded their two vehicles and made the long journey to Mitchell's dream college. They spent all day unpacking and meeting new people. Mitchell found it all exhilarating.

After such an exhausting day and an emotional farewell to his family, Mitchell was confident sleep would come effortlessly, but it didn't. Everything was too quiet and too unfamiliar, and every sound seemed out of place. Waves of loneliness swept over him, even though his roommate snored softly just a few feet away. Mitchell unlocked his phone to text his mom, but he couldn't figure out what to say or even why he wanted to text her. He fell asleep trying to figure out what to type.

The next morning, Mitchell woke to the phone, still in his hand, buzzing. A text from his mom wished him an exciting first day of orientation, and she ended it with the same three heart emojis she always did. There were texts from his sister and his best friend, too, and his loneliness evaporated in an instant. The texts were something familiar in the midst of everything new. The atmosphere in his dorm room started to feel electric, and he felt it inside too. What an exhilarating start to the first day of the rest of his life.

1a. How does the main character change during this experience?

- (A) He learns that there is value in both the familiar and the unfamiliar.
- (B) He learns to embrace new experiences with a positive attitude.
- (C) He learns that not everything turns out the way he wants it to.
- (D) He learns that family is more important than friends.

Pretest (cont.)

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

2a. What is the meaning of the word *exhilarating* as used in the passage?

- (A) unpredictable
- (B) unintended
- (C) exhausting
- (D) exciting

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

3. Choose the sentence that shows correct subject-verb agreement.

- (A) Friends and family members gathers to celebrate a student's graduation.
- (B) Nations all over the world sends their athletes to the Olympics.
- (C) Every one of the children wants to win the talent competition.
- (D) Neither Dad nor the kids feels like eating at home tonight.

4. Rewrite this sentence using correct punctuation:

Do you know where the St Lawrence Expressway is asked the lost tourist

Pretest (cont.)

Directions: Read the passage and follow the directions for problems 5 and 6.

Have you ever wondered how your cat feels about you? Cats are notoriously independent, which can make it difficult for humans to understand them. Some people wonder if their cats even care about them at all. For example, you may have heard a cat owner lament that even when they return home after an extended absence, their cat doesn't even glance up, much less greet them the way a dog would. Certain cat behaviors may offer some insight into the bonds cats have with their humans.

Cat behavior experts suggest that people pay attention to where their cats sleep. If a cat sleeps in a separate room from their human, especially in a hidden space, the cat may not yet have full trust in its owner. Sleeping is a vulnerable activity in the wild, so cats must take care to ensure their safety before they rest.

Cat behavior experts theorize that if a cat sleeps with a person, they are deeply bonded to that person. It means the cat trusts that person to keep them safe while they sleep. Some experts think there is even more to be learned by noticing *where* the cat sleeps with the person. If it sleeps near a person's head, this may indicate the closest bond of all, while sleeping near a person's feet may suggest the cat is quite attached but still relishes a bit of independence.

The next time you are wondering how your feline friend feels about you, look no further than where it sleeps to uncover the answer.

5. What was most likely the author's purpose in writing this text?

- (A) to encourage people to allow their cats to sleep with them
- (B) to provide ideas on how people can bond with their cats
- (C) to persuade people that cats can be affectionate
- (D) to explain ways cats might show attachment

6. Summarize the passage in 2–3 sentences.

Pretest (cont.)

7. Which of these are sentence fragments? Mark all that apply.

- (A) Take out the trash.
- (B) Falling in love for the very first time.
- (C) If you want to see something hilarious!
- (D) Keep in mind when the final project is due.
- (E) Binge watching the latest reality show all weekend.
- (F) The former First Lady of the United States, Jacquelyn Kennedy.
- (G) The first book in the series was my favorite, but I like this one too.
- (H) Buying frequently used items in bulk is a good way to save money.
- (I) A day that began with so much promise but turned unexpectedly bad.

8a. Which figure of speech appears in this sentence?

This paper is going to take me the rest of my life to write.

- (A) alliteration
- (B) hyperbole
- (C) metaphor
- (D) personification

8b. Write an original sentence that uses a simile.

9. Which word best completes the sentence?

Everyone needs a _____ ally they can depend on when things get tough.

- (A) trusted
- (B) trusting
- (C) distrusted
- (D) mistrustful

Pretest (cont.)

10a. To which two sentences should you add a hyphen?

- (A) The old green car barely runs anymore.
- (B) He is a well rounded person because of his travels.
- (C) Maya, who is six years old, appeared on the news last night.
- (D) A high spirited puppy can be difficult to train, but don't give up.
- (E) She wants to break the state record in her gymnastics division.
- (F) I was so grateful to see a friendly face awaiting me when my plane landed.

10b. Write an original sentence that uses a hyphen correctly.

11. Simplify each expression.

11a. $(3x^2 - 5x + 7) + (2x^2 - 12) =$ _____

11b. $(-6v^2 + 2v + 2) - (9v^2 - v + 6) =$ _____

11c. $(2n^2 + n)(4n - 2) =$ _____

12. Solve for each variable.

12a. $5p + 12 = 7p + 16$ $p =$ _____

12b. $-2(c + 6) = -4(2c + 4)$ $c =$ _____

12c. $3(y + 3) = 6(-y + 3)$ $y =$ _____

13. Solve each quadratic equation.

13a. $x^2 + 12x - 64 = 0$ $x =$ _____ and $x =$ _____

13b. $6x^2 - 10x - 4 = 0$ $x =$ _____ and $x =$ _____

13c. $2x^2 + 2x + 6 = 10$ $x =$ _____ and $x =$ _____

Pretest (cont.)

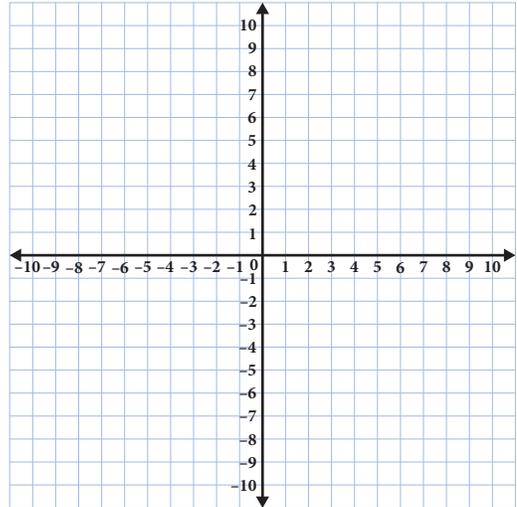
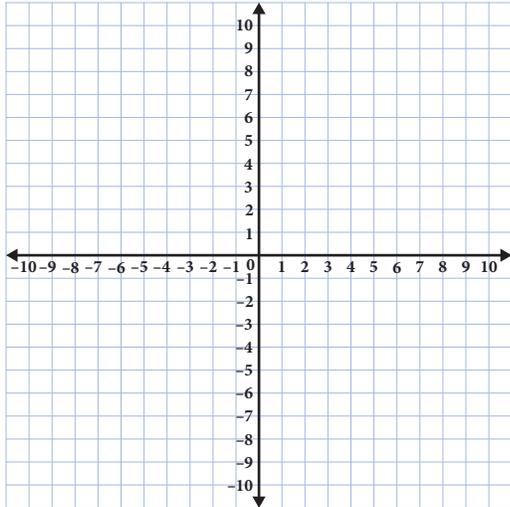
14. Graph each system of inequalities on the coordinate plane. Include shading.

14a. $x - y \leq 4$

$x + 2y \geq 10$

14b. $3x + 2y < 8$

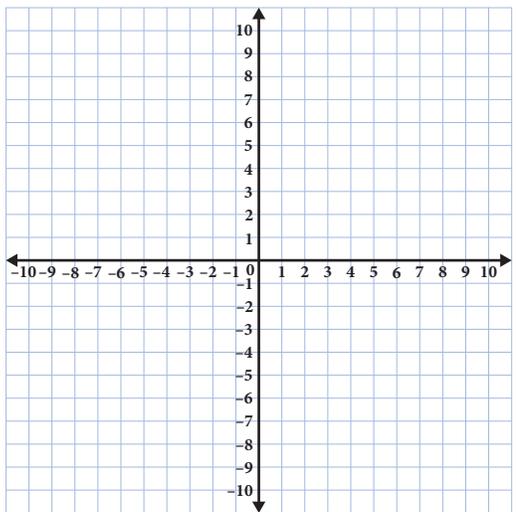
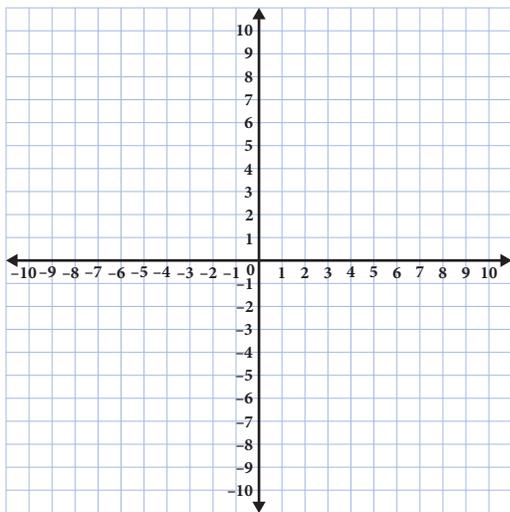
$x - y \geq 1$



15. Graph each quadratic function on the coordinate plane.

15a. $f(x) = x^2 - 6x + 7$

15b. $f(x) = x^2 + 2x - 4$



16. Write the factored form of each quadratic expression.

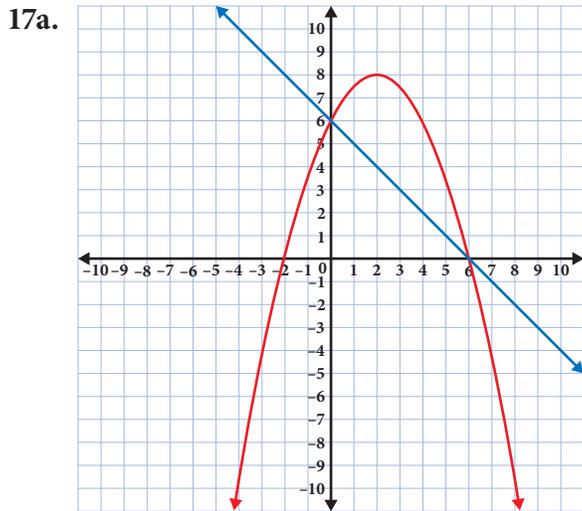
16a. $x^2 + 11x + 24$ _____

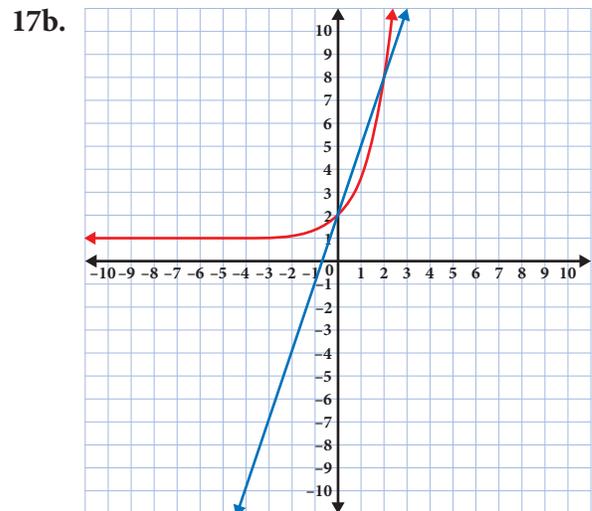
16b. $x^2 + 3x - 40$ _____

16c. $x^2 - 12x + 27$ _____

Pretest (cont.)

17. Write the solution(s) to each system of equations.





18. Write the system of equations or inequalities that can be used to represent each scenario.

18a. Nora rode several rides at a local fair. Each large ride costs \$4, and each small ride costs \$3. Nora spent a total of \$33 and rode a total of 9 rides.

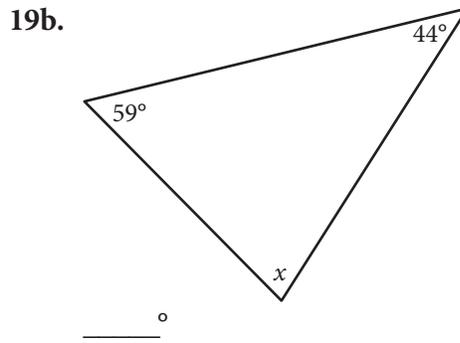
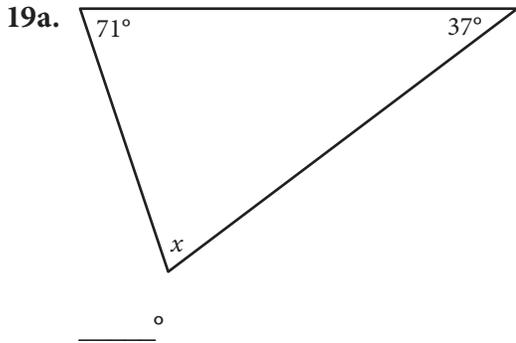
Write a system of equations that can be used to model the relationship between the number of large rides, x , and small rides, y , that Nora rode at the fair.

18b. Sadie has two part-time jobs. She earns \$11 per hour working at a grocery store and \$17 per hour working at a gym. Sadie's goal is to earn at least \$250 per week while working less than 25 hours total.

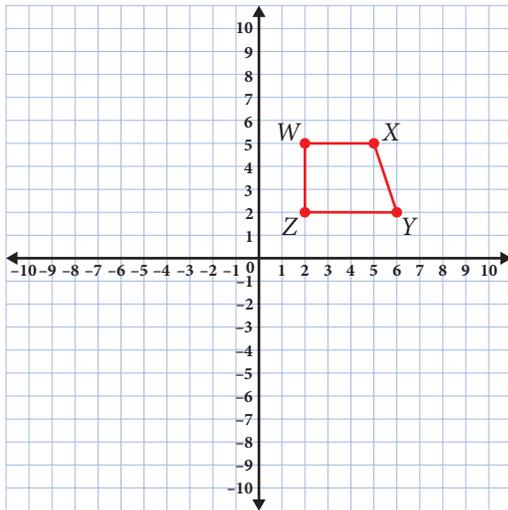
Write a system of inequalities that can be used to determine the combination of hours worked at the grocery store, x , and the gym, y , with the given constraints.

Pretest (cont.)

19. Find the missing angle measure, x , of each triangle.



20. Identify the coordinates of the given figures after each of the transformations is applied.



20a. What would be the coordinate of point Z' if the figure were translated 7 units down?

20b. What would be the coordinate of point Y' if the figure were reflected across the x -axis, then reflected across the y -axis?

20c. What would be the coordinate of point W' if the figure were rotated 90 degrees counterclockwise about the origin, then shifted 2 units right?

Posttest

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

The last thing I wanted to do on a Saturday morning was get up early, especially for hours of arduous physical work on a hot summer day for free. My dad had been trying to get me to volunteer at the animal shelter with him for several months, but I always managed to be “too busy” with something for school. The first week of summer vacation left me no excuse, so Dad ensured I was up at 5:00 AM.

When we arrived an hour later, Dad asked me to walk each dog while he cleaned out its cage. These dogs were beyond excited to get outside for the first time since the night before. They were so full of energy. The big dogs pulled me so hard I thought my arm might fall off.

One dog didn’t want to come out though. It was an older dog with a sad face and a gaunt form. I could tell this animal had a rough life. He seemed to lack the will to live. He wouldn’t come out of his cage, so I went in and sat with him instead. I offered him some treats and petted him gently. Before long, his tail was wagging, and he seemed years younger. He needed love more than he needed a walk.

“Wow,” Dad said. “Ranger usually wants to be left alone. Maybe he was just waiting for the right person.”

Dad didn’t have to beg me to go to the animal shelter after that. I was ready to go before he was because I knew Ranger was waiting for me. Dad doesn’t know it yet, but before summer is over, Ranger is coming home with me. I am his person.

1a. How does the main character change during this experience?

- (A) He becomes fit and is more able to do the physical work.
- (B) He learns to stop procrastinating on his responsibilities.
- (C) He finds joy and purpose in an activity he used to dread.
- (D) He develops an interest in volunteering for other groups.

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

Posttest (cont.)

2a. What is the meaning of the word *arduous* as used in the passage?

- (A) boring
- (B) difficult
- (C) charitable
- (D) embarrassing

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

3. Choose the sentence that shows correct subject-verb agreement.

- (A) He and his friends likes to go to hockey games together.
- (B) The children and the bus driver sings a song each day.
- (C) All the students in my class think they failed the quiz.
- (D) Each citizen in the United States have a right to vote.

4. Rewrite this sentence using correct punctuation:

The principal asked Have you seen Mrs Lee yet today

Posttest (cont.)

Directions: Read the passage and follow the directions for problems 5 and 6.

Some areas, like beaches, are difficult for people who use wheelchairs to access. Wheels and soft beach sand just do not work well together! Thanks to several clever inventors and a growing public commitment to universal access to such public spaces, though, significant advances have been made in beach accessibility in the last few decades.

Some public beaches have built special ramps and wider boardwalks to better accommodate wheelchairs. However, this solution still leaves people who use wheelchairs unable to traverse the sand. The chairs can only go as far as the walkways extend, which is usually quite a distance from the water.

To help solve this problem, some beach communities have installed rubber mats that sit on the surface of the sand and support wheelchairs. This solution does enable wheelchair users to get closer to the water, but the areas they can explore are still limited by the locations of the mats.

Fortunately, specially designed beach wheelchairs feature oversized plastic wheels and other features that resist sinking in the sand. In fact, some of these chairs are even made to go into the water, enabling wheelchair users to experience both sand and surf alongside friends and family. These innovations and others are helping more people than ever enjoy the beach.

5. What was most likely the author's purpose in writing this text?
- (A) to explain the problems wheelchairs have on beaches
 - (B) to describe recent innovations that improve beach accessibility
 - (C) to provide a brief history of the Americans with Disabilities Act
 - (D) to inspire people to support and create new accessibility options
6. Summarize the passage in 2–3 sentences.

Posttest (cont.)

7. Which of these are sentence fragments? Mark all that apply.

- (A) Forgot my wallet at home.
- (B) Pass me the biggest book, please.
- (C) Taking his time to make the right decision.
- (D) Elephants greet one another with their trunks.
- (E) I started keeping a journal when I was seventeen.
- (F) The park board's plan for replacing the old playground.
- (G) Making your own salad dressing is not as hard as people think.
- (H) Trade schools offer an affordable and practical alternative to college.
- (I) Having a large social media presence.

8a. Which figure of speech appears in this sentence?

The sun greeted me through the open window.

- (A) simile
- (B) hyperbole
- (C) metaphor
- (D) personification

8b. Write an original sentence that uses alliteration.

9. Which word best completes the sentence?

I am not sure I got the right answer, so I am _____.

- (A) calculating
- (B) recalculating
- (C) uncalculating
- (D) miscalculating

Posttest (cont.)

10a. Which two sentences require you to add a hyphen?

- (A) That sweet little baby waved at me!
- (B) Sophia just turned eleven years old.
- (C) Grandma likes apple cinnamon oatmeal.
- (D) I want to be known as a hard working person.
- (E) The lines on that dangerous hilly street are hard to see.
- (F) A high powered executive approved the merger on her own.

10b. Write an original sentence that uses a hyphen correctly.

11. Simplify each expression.

11a. $(-w^2 + 2w + 4) + (10w^2 - 12w) =$ _____

11b. $(7m^2 - m - 10) - (-2m^2 + 3m - 1) =$ _____

11c. $(4c^2 - 3)(c^2 - 1) =$ _____

12. Solve for each variable.

12a. $-8a - 10 = 2a + 20$ $a =$ _____

12b. $6(5m - 2) = -5(m + 8)$ $m =$ _____

12c. $8(k - 4) = 2(k + 8)$ $k =$ _____

13. Solve each quadratic equation.

13a. $x^2 - 9x - 22 = 0$ $x =$ _____ and $x =$ _____

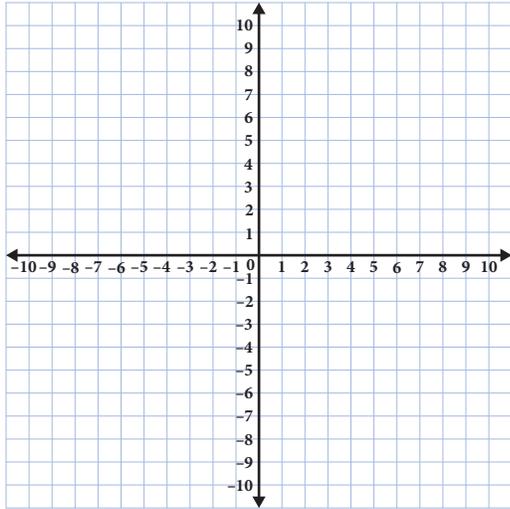
13b. $-3x^2 - 10x - 3 = 0$ $x =$ _____ and $x =$ _____

13c. $2x^2 + 12x - 59 = -5$ $x =$ _____ and $x =$ _____

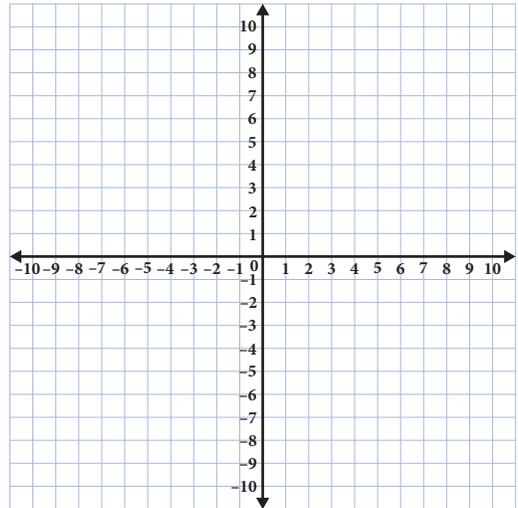
Posttest (cont.)

14. Graph each system of inequalities on the coordinate plane. Include shading.

14a. $2x - y > -5$ $7x + y < -4$

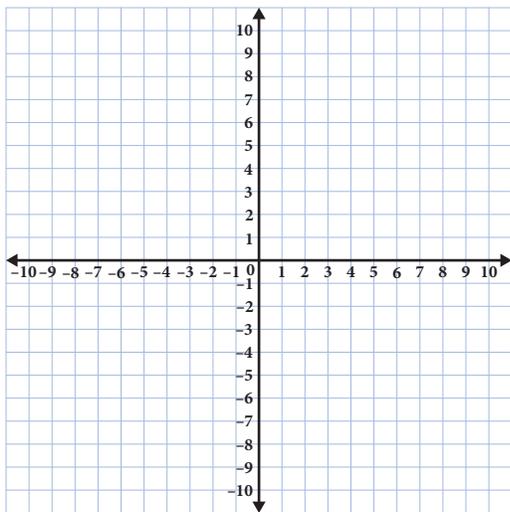


14b. $7x - 2y < 10$ $2x + y \leq 6$

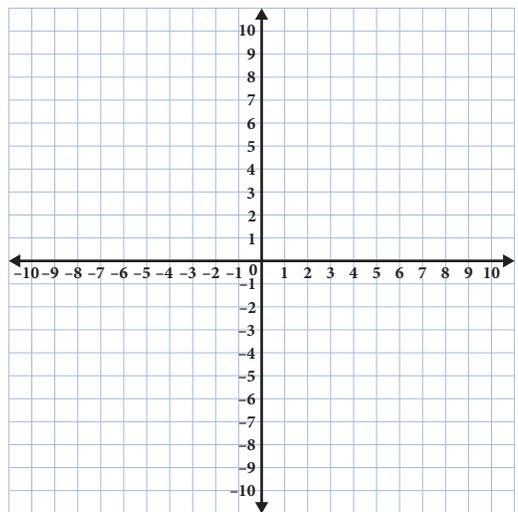


15. Graph each quadratic function on the coordinate plane.

15a. $f(x) = 2x^2 - 8x + 5$



15b. $f(x) = -x^2 - 4x - 2$



16. Write the factored form of each quadratic expression.

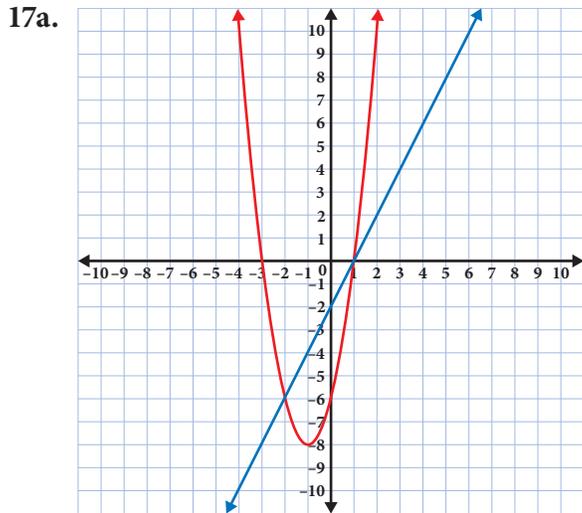
16a. $x^2 + 7x + 12$ _____

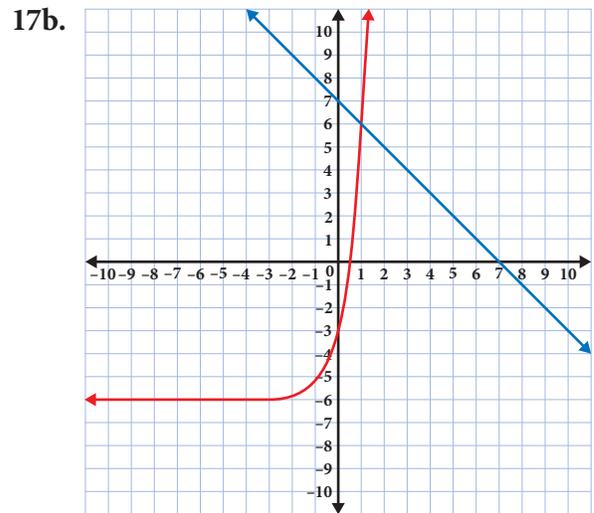
16b. $x^2 - 7x - 8$ _____

16c. $x^2 - 7x + 6$ _____

Posttest (cont.)

17. Write the solution(s) to each system of equations.





18. Write the system of equations or inequalities that can be used to represent each scenario.

- 18a. Two families went out for milkshakes. One family ordered 3 small and 2 large milkshakes, paying \$15. The next family ordered 5 small and 1 large milkshake, paying \$13.

Write a system of equations that can be used to determine the cost of a small milkshake, x , and a large milkshake, y .

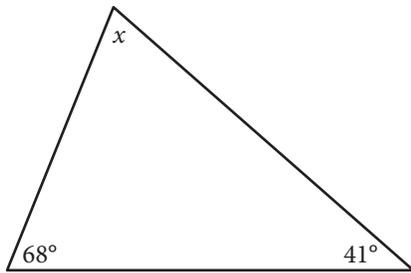
- 18b. A school is selling tickets to a play. Each student ticket costs \$3 and each adult ticket costs \$5. The school wants to earn more than \$2,500 from ticket sales and can sell a maximum of 150 tickets.

Write a system of inequalities that can be used to determine the combination of student tickets, x , and adult tickets, y , with the given constraints.

Posttest (cont.)

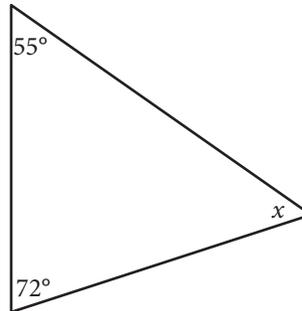
19. Find the missing angle measure, x , of each triangle.

19a.



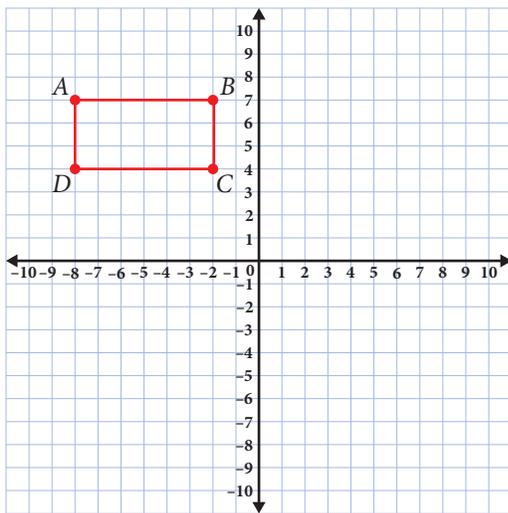
_____°

19b.



_____°

20. Identify the coordinates of the given figures after each of the following transformations is applied.



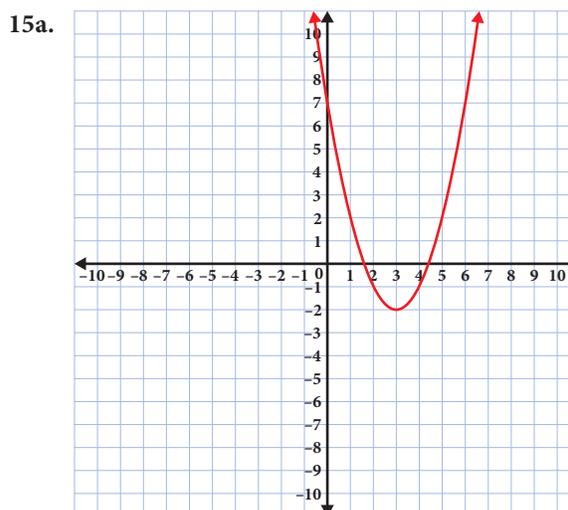
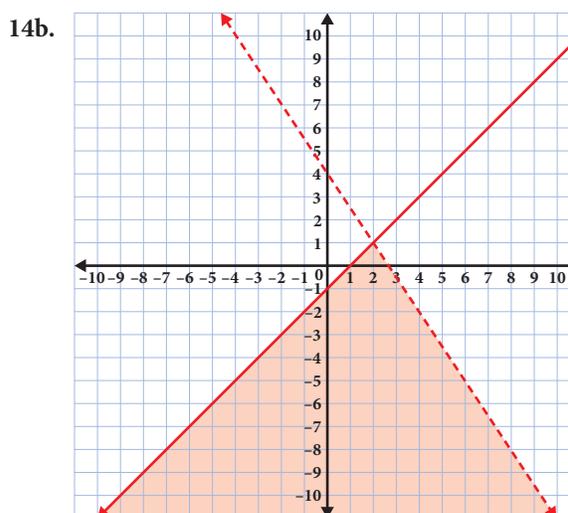
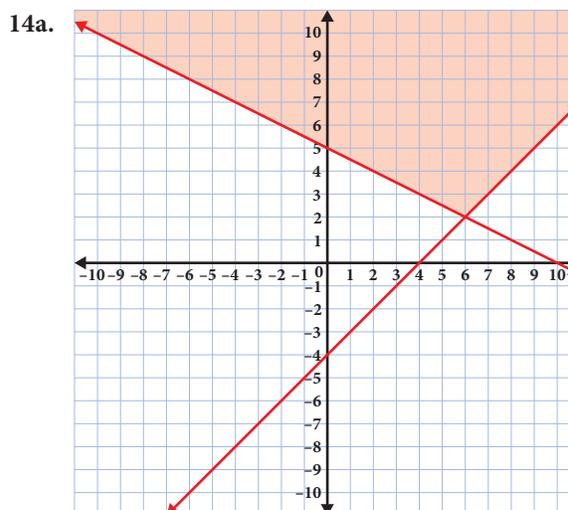
20a. What would be the coordinate of point A' if the figure were translated 7 units to the right?

20b. What would be the coordinate of point C' if the figure were reflected across the y -axis, then shifted 5 units down?

20c. What would be the coordinate of point D' if the figure were rotated 90 degrees clockwise about the origin, then reflected across the x -axis?

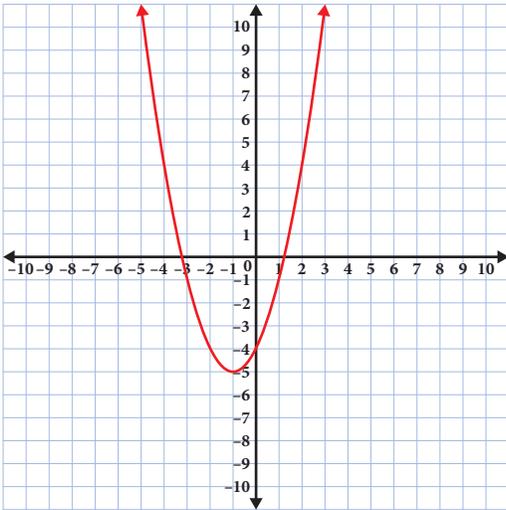
Pretest Answer Key

- 1a. A
- 1b. At the beginning of the story, Mitchell cannot wait to get away from everything familiar in his old life, but by the end, hearing from familiar people fills him with energy and joy.
- 2a. D
- 2b. *Exhilarating* and *electric* appear close together in the final paragraph. We know that when Mitchell felt that electric feeling at the beginning of the story, he was excited to go to college. So when he feels that electric feeling again at the end of the story, he is excited again.
3. C
4. “Do you know where the St. Lawrence Expressway is?” asked the lost tourist.
5. D
6. People can have trouble interpreting how their cat feels about them, but noticing where the cat sleeps can give some clues. If a cat sleeps near someone, they are attached to that person. If the cat sleeps alone somewhere, it may still be trying to build trust with a person.
7. B, C, E, F, I
- 8a. B
- 8b. Sample answer:
She rages like a storm in spring when she gets mad.
9. A
- 10a. B, D
- 10b. Sample answers:
He is a well-rounded person because of his travels.
A high-spirited puppy can be difficult to train, but don't give up.
- 11a. $5x^2 - 5x - 5$
- 11b. $-15v^2 + 3v - 4$
- 11c. $8n^3 - 2n$
- 12a. $p = -2$
- 12b. $c = -\frac{2}{3}$
- 12c. $y = 1$
- 13a. $x = -16$ and $x = 4$
- 13b. $x = -\frac{1}{3}$ and $x = 2$
- 13c. $x = -2$ and $x = 1$



Pretest Answer Key (cont.)

15b.



16a. $(x + 3)(x + 8)$

16b. $(x + 8)(x - 5)$

16c. $(x - 3)(x - 9)$

17a. $(0, 6)$ and $(6, 0)$

17b. $(0, 2)$ and $(2, 8)$

18a. $4x + 3y = 33$ and $x + y = 9$

18b. $11x + 17y \geq 250$ and $x + y < 25$

19a. 72°

19b. 77°

20a. $(2, -5)$

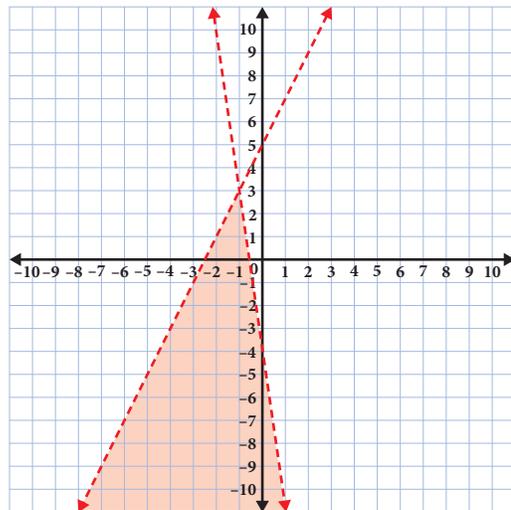
20b. $(-6, -2)$

20c. $(-3, 2)$

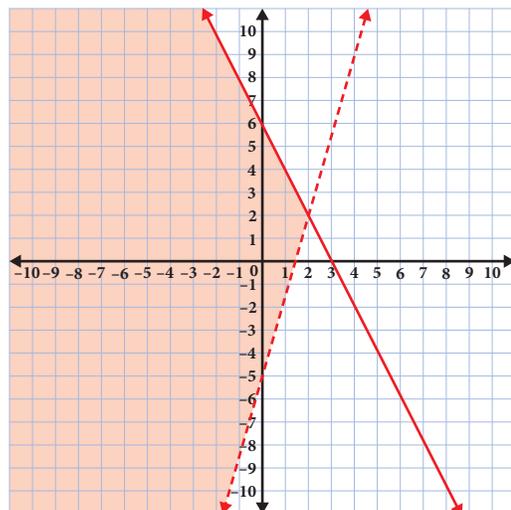
Posttest Answer Key

- 1a. C
- 1b. By the end of the story, the main character no longer tries to avoid going to the animal shelter. He doesn't resent getting up early. Instead, he gets up on his own and is excited to go to the shelter, where he knows he is making a difference.
- 2a. B
- 2b. *Arduous* and *physical* both describe the work the main character will do. The passage mentions it is a hot summer day and that it will take hours. These other descriptions are consistent with difficult work.
3. C
4. The principal asked, "Have you seen Mrs. Lee yet today?"
5. B
6. The United States has made a lot of progress in creating an accessible society, but some areas like beaches present extra challenges. In recent years, special mats, ramps, walkways, and even specially outfitted wheelchairs have improved life for people who once could not access beaches.
7. A, C, F, I
- 8a. D
- 8b. Sample answer:
Bubble gum bubbles burst badly.
9. B
- 10a. D, F
- 10b. Sample answers:
I want to be known as a hard-working person.
A high-powered executive approved the merger on her own.
- 11a. $9w^2 - 10w + 4$
- 11b. $9m^2 - 4m - 9$
- 11c. $4c^4 - 7c^2 + 3$
- 12a. $a = -3$
- 12b. $m = -\frac{4}{5}$
- 12c. $k = 8$
- 13a. $x = -2$ and $x = 11$
- 13b. $x = -3$ and $x = -\frac{1}{3}$
- 13c. $x = -9$ and $x = 3$

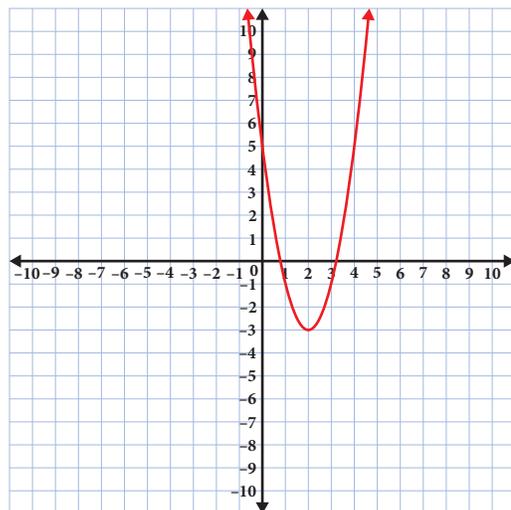
14a.



14b.

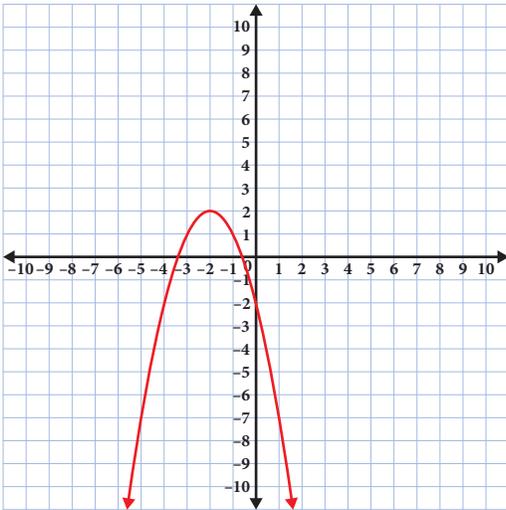


15a.



Posttest Answer Key (cont.)

15b.



16a. $(x + 4)(x + 3)$

16b. $(x - 8)(x + 1)$

16c. $(x - 6)(x - 1)$

17a. $(-2, -6)$ and $(1, 0)$

17b. $(1, 6)$

18a. $3x + 2y = 15$ and $5x + y = 13$

18b. $3x + 5y > 2,500$ and $x + y \leq 150$

19a. 71°

19b. 53°

20a. $(-1, 7)$

20b. $(2, -1)$

20c. $(4, -8)$