8th GRADE

Reading/Writing - Modified
The Quilt

It was around my sixth birthday in February, 1929, when my brother, William, and I boarded that fateful train. We were to travel from New York to a place called Wisconsin. A sixteen month old baby, he clung to me the way static electricity clings to clothes. The air was bitterly cold and seemed to stab through the holes of my thin coat. Clutching my coat on the noisy station platform, I was unsure of what my future held. William wasn’t dressed properly either, so I wrapped him in a quilt my mother made embroidered with our family crest.

Just one year ago, our family had come from Ireland to New York City where we shared an apartment with another family. My father was lucky enough to be hired by Edison because he spoke English. In order to earn an extra $1 each week, my mother embroidered scarves and handkerchiefs from home. With Da’s paycheck and Ma’s sewing, we managed to scrape together our portion of the rent each month. We may have been poor, but we were still a family united as one. That is, until my father died on the job. A heart attack, most likely, said the doctor.

Ma couldn’t support our half of the rent anymore and faced eviction. The other family said she could stay but suggested she put her children up for adoption. Wealthy people out west could provide a chance for a better life. But before Ma could make a decision, she became ill with tuberculosis and was sent to a sanitarium. Without any family to care for us, William and I found ourselves aboard a train soon after.

Singling me out of the dozens of other children, a man and woman from the Children’s Aid Society approached me on the platform. The woman touched the lapel of my tattered coat, and cleared her throat.

“What’s your name, child?”

“...Emily O’Connor,” I replied, unsure whether I should be talking to this stranger. I squeezed my eyes shut and wished with all my heart for Ma to appear. When I opened them I saw only the two strangers.

“How old are you?”
Teleportation Gone Wrong!

Haru was no stranger to traveling with his family. He’d been to more countries by the time he reached his fifth birthday than some people had been in their entire lives. Haru’s mother was a well-respected judge and she often had to travel for her work. Since the invention of teleportation booths, it was easy for the whole family to travel with her. They would pack their things and join her for the weekend. On Mondays, they would pop back to their homes so they could go to school and work.

Haru loved this about his family. He loved getting to see new places and meeting new people. This particular weekend, they were visiting his mother in Japan. There was the added bonus of getting to see his grandparents, so he was especially excited about this trip. He’d packed his new camera and couldn’t wait to document his travels.

When he arrived, he found that his grandparents had prepared all of his favorite foods and had set up a cot in the backyard so he could camp under the stars. He spent the entire weekend seeing new sights and going for jogs with his grandfather. He couldn’t imagine a better way to spend his time. The night before his family was set to return home, his grandparents surprised them. They announced, “We’ve decided to return home with you, and spend more time with the family.”

Haru could hardly contain himself, he was so excited! He couldn’t wait to introduce his grandparents to his friends and show them his new school. Suddenly, going home wasn’t going to be so sad after all.

When Haru woke up, he hopped right out of bed. He was sad to leave Japan, but was thrilled to spend more time with his grandparents. He carried his suitcase downstairs and waited for everyone else to wake up. Slowly, the family started to trickle in for coffee and breakfast. It was another hour before everyone was ready to go. Haru helped his dad carry the suitcases out to the sidewalk. Then, the whole family made the short trip to the teleportation station.
Louis Pasteur

Louis Pasteur was a talented chemist and biologist. His breakthroughs on the causes of disease in the 1800s changed medicine forever. His work has saved countless lives.

Early Life

Pasteur was born on December 27, 1822, to a poor family in Dole, France. He was an average student as a boy. Pasteur was more interested in drawing and painting than school. He was considered very talented.

He earned his degrees from the Royal College of Besançon in 1840 and 1842. He went on to become a researcher at École Normale Supérieure. ENS was a special university in Paris where he earned his doctorate in 1847.

In 1848, Pasteur became a professor of chemistry at the University of Strasbourg. This is where Pasteur met Marie Laurent. She was the daughter of the head of the university. They got married on May 29, 1849 and had five children. Unfortunately, three of them died of typhoid as children. This experience with tragedy motivated Pasteur to research and work toward curing diseases.

Career
In 1854, Pasteur became the dean of the new science faculty at the University of Lille. He began to study fermentation. Fermentation is process that turns sugar into alcohol. He then moved to Paris to become the director of scientific studies at ENS.

A portrait of a young Pasteur

Pasteur also served as professor of geology, physics, and chemistry at another elite school in Paris. He later established the Pasteur Institute in Paris in 1887 and directed it until his death in 1895.

Fermentation

In 1857, Pasteur's research led him to the conclusion that fermentation is caused by microscopic life. These tiny forms of life are known as micro-organisms. He showed that fermentation with yeast changes sugar to alcohol without exposure to air. He also showed that further fermentation by bacteria makes lactic acid. This insight led him to develop germ theory. Pasteur's germ theory says that spoiled food and human illnesses are caused by the growth of micro-organisms.
A Little More Careful

“I just don’t understand why you had to go and ruin everything!” My older sister Rowan stood in front of me with her hands on her hips. I looked at my feet, unsure of what I could say to fix this. “I’m sorry, Rowan—” I started to say, but she cut me off by turning on her heel and stomping away. I was left standing by myself in front of the flight deck.

Our grandparents were looking after Rowan and me while our parents were on a moonwalk. It wasn’t unusual for these types of trips to take around a week or two. This was the first time that Rowan had tried to sneak out, though. She had used the window chamber in my bedroom to hoist herself into the upstairs hallway to meet her friends for a midnight movie. I remember not being able to sleep at all as I waited for her to come back. It felt like a million hours and before I knew it, the sun projectors were lighting up.

Out here in space, we’re lucky to get some starlight, let alone any real sunlight. The scientists on our spacecraft had found a way to copy the sun’s rays to give us a little taste of our old lives on Earth.

Even though we were floating around in space, some things were still the same. Like Rowan for example. She was always getting mad at me. Usually, I’d do anything for her to include me in her adventures, but this time I couldn’t help it.

When the “sun” had lit up my room and she still wasn’t back, I couldn’t take it. I ran into my grandparents’ room and told them everything. From the way she’d pulled herself up onto my window ledge to the way she’d told me not to tell anyone about it. Before I knew it, my grandparents had found Rowan and were in the process of grounding until our parents got back.

Hours later, Rowan still wasn’t talking to me. I tried to knock on her door, but I just heard the click as she locked me out. Finally, I got the idea that I would write her an apology note.

*Dear Rowan,*
Crystal City ISD Curriculum and Instruction

LEARNING ACTIVITIES/RESOURCES

Dates: April 6-May 1, 2020

Subject: Math

Grade Level: 8th

Campus: Sterling H. Fly Jr. High

<table>
<thead>
<tr>
<th>DAY</th>
<th>ACTIVITY</th>
<th>INSTRUCTIONS</th>
<th>RESOURCE/LINK</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>Freckle TEKS 8.6C Using a converse of the Pythagorean Theorem</td>
<td>Use calculator to solve problems. (desmos app) Then log into Prodigy.</td>
<td>Freckle on line assignments</td>
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<td>Week 2</td>
<td>Freckle TEKS 8.7C Use the Pythagorean Theorem to determine the length of</td>
<td>Use calculator to solve problems. (desmos app) Then log into Prodigy.</td>
<td>Freckle on line assignments</td>
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<td>a missing side.</td>
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<td>Week 3</td>
<td>Freckle TEKS 8.7D Apply the</td>
<td>Connect points to make a right triangle. Then use Pythagorean Theorem to</td>
<td>Freckle on line assignments</td>
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<td>Pythagorean Theorem to find the distance</td>
<td>solve. Then log into Prodigy.</td>
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<td>between two points.</td>
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<tr>
<td>Week 4</td>
<td>Freckle TEKS 8.8D Parallel lines cut by transversal</td>
<td>Use Formula Chart (FSST section) to find the measurement of angles. Then</td>
<td>Freckle on line assignments</td>
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<td>log into Prodigy.</td>
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Please call 830-374-2367 for any questions.
Use a converse of the Pythagorean Theorem to determine whether a triangle is acute, right, or obtuse.

I. Multiple Choice

Circle the correct answer.

1. What type of triangle is formed by the three side lengths given?

   a = 9 cm  
   b = 12 cm  
   c = 15 cm

   - Acute
   - Right
   - Obtuse

2. What type of triangle is formed by the three side lengths given?

   a = 3 cm  
   b = 4 cm  
   c = 6 cm

   - Acute
   - Right
   - Obtuse

3. What type of triangle is formed by the three side lengths given?

   a = 9 cm  
   b = 13 cm  
   c = 15 cm

   - Acute
   - Right
   - Obtuse
4. What type of triangle is formed by the three side lengths given?

   \[ a = 2 \text{ cm} \]
   \[ b = 3 \text{ cm} \]
   \[ c = 4 \text{ cm} \]

   \[ \text{Acute} \quad \text{Right} \quad \text{Obtuse} \]

5. What type of triangle is formed by the three side lengths given?

   \[ a = 5 \text{ cm} \]
   \[ b = 6 \text{ cm} \]
   \[ c = 9 \text{ cm} \]

   \[ \text{Acute} \quad \text{Right} \quad \text{Obtuse} \]

5. What type of triangle is formed by the three side lengths given?

   \[ a = 3 \text{ cm} \]
   \[ b = 4 \text{ cm} \]
   \[ c = 5 \text{ cm} \]

   \[ \text{Acute} \quad \text{Right} \quad \text{Obtuse} \]

7. What type of triangle is formed by the three side lengths given?

   \[ a = 8 \text{ cm} \]
   \[ b = 12 \text{ cm} \]
   \[ c = 14 \text{ cm} \]

   \[ \text{Acute} \quad \text{Right} \quad \text{Obtuse} \]

8. What type of triangle is formed by the three side lengths given?

   \[ a = 6 \text{ cm} \]
   \[ b = 8 \text{ cm} \]
   \[ c = 10 \text{ cm} \]

   \[ \text{Acute} \quad \text{Right} \quad \text{Obtuse} \]
Topic: 8.7(C)

Determine the length of a missing side in a right triangle.

1. Multiple Choice

Circle the correct answer.

1. Find the missing side length if we assume that the shape is a right triangle with legs (A and B) and a hypotenuse (C).

A = 7 units
B = ?
C = 16 units

\[ \sqrt{207} \text{ units} \quad \sqrt{227} \text{ units} \quad \sqrt{235} \text{ units} \quad \sqrt{249} \text{ units} \]

2. Find the missing side length if we assume that the shape is a right triangle with legs (A and B) and a hypotenuse (C).

A = 5 units
B = 8 units
C = ?

\[ \sqrt{76} \text{ units} \quad \sqrt{89} \text{ units} \quad \sqrt{93} \text{ units} \quad \sqrt{99} \text{ units} \]

3. Find the missing side length if we assume that the shape is a right triangle with legs (A and B) and a hypotenuse (C).

A = ?
B = 10 units
C = 12 units

\[ \sqrt{38} \text{ units} \quad \sqrt{40} \text{ units} \quad \sqrt{44} \text{ units} \quad \sqrt{56} \text{ units} \]
4. Find the missing side length if we assume that the shape is a right triangle with legs (A and B) and a hypotenuse (C).

A = 3 units
B = ?
C = 5 units

[3 units] [4 units] [7 units] [11 units]

5. Find the missing side length if we assume that the shape is a right triangle with legs (A and B) and a hypotenuse (C).

A = ?
B = 8 units
C = 12 units

[√66 units] [√72 units] [√80 units] [√88 units]

6. Find the missing side length if we assume that the shape is a right triangle with legs (A and B) and a hypotenuse (C).

A = 9 units
B = ?
C = 24 units

[√450 units] [√495 units] [√520 units] [√565 units]

7. Find the missing side length if we assume that the shape is a right triangle with legs (A and B) and a hypotenuse (C).

A = 4 units
B = 6 units
C = ?

[√52 units] [√56 units] [√60 units] [√72 units]

II. Short Answer

Write your answer in the box.

[go to prodigy 30 minutes]
Apply the Pythagorean Theorem to find the distance between two poi...

1. Multiple Choice

Circle the correct answer.

1. Points $C(-3, 2), D(3, -6)$, and $E(3, 2)$ are plotted on the graph. What is the distance between points $C$ and $D$? Round the answer to the nearest tenth.

2. Points $M(-3, 2), N(3, -9)$, and $O(3, 2)$ are plotted on the graph. What is the distance between points $M$ and $N$? Round the answer to the nearest tenth.

3. What is the distance between the two points shown?
4. What is the length of the red line segment?

\[ \sqrt{27} \quad \sqrt{29} \quad \sqrt{31} \quad \sqrt{32} \]

5. Points \( P(-6, 6) \), \( Q(2, -9) \), and \( R(2, 6) \) are plotted on the graph. What is the distance between points \( P \) and \( Q \)? Round the answer to the nearest tenth.

\[ 17 \quad 13 \quad 5 \quad 7 \]

6. Find the distance between \( (3, 5) \) and \( (-1, -3) \).

\[ \sqrt{72} \quad \sqrt{76} \quad \sqrt{80} \quad \sqrt{88} \]

go to prodigy 30 minutes
When a transversal cuts parallel lines, same side interior and same side...

1. Short Answer

Write your answer in the box.

1. What is the measure (in degrees) of Angle 2?

Answer:

2. What is the measure (in degrees) of Angle 1?

Answer:

3. What is the measure (in degrees) of Angle 1?

Answer:

Prodigy 30 minutes
Topic: 8.8(D)

Use facts about supplementary, complementary, vertical and adjacent...

1. Multiple Choice

Circle the correct answer.

1. Angle 1 and Angle 2 are complementary. Which equation could you use to find the measure of Angle 2?

   Angle 1: 38 degrees
   Angle 2: x degrees
   \[
   \begin{align*}
   x - 38 &= 90 \\
   x - 90 &= 38 \\
   38 + x &= 90
   \end{align*}
   \]

2. Angle 1 and Angle 2 are supplementary. Which equation could you use to find the measure of Angle 2?

   Angle 1: 160 degrees
   Angle 2: x degrees
   \[
   \begin{align*}
   x &= 180 + 160 \\
   90 + 160 &= x \\
   160 + x &= 180
   \end{align*}
   \]

3. Angle 1 and Angle 2 are complementary. Which equation could you use to find the measure of Angle 2?

   Angle 1: 50 degrees
   Angle 2: x degrees
   \[
   \begin{align*}
   50 + 90 &= x \\
   90 - 50 &= x \\
   x - 90 &= 50
   \end{align*}
   \]