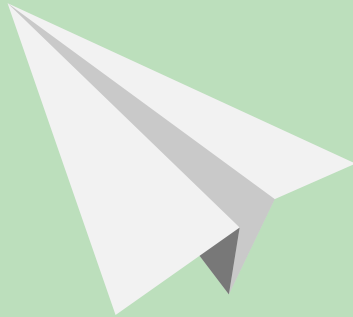


# INTRODUCTION

Welcome to Childhood Cartoons! Our town was founded on November 10th, 1969. Despite a few fires and other incidents, we have managed to keep streaming our shows for over 50 years! The town was finalized on August 12th, 2013. We have our four main quadrants: Sesame Street, Paw Patrol, Spongebob, and Peppa Pig. Make sure to visit all of our quadrants because they each have their own unique landmarks and great stores!



## THIS SEGMENT IS SPONSORED BY THE CULT.



# CHILDHOOD CARTOONS



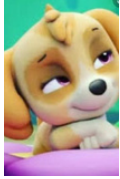
**WOW!**

**TIFFANY ZHANG  
BROOKE JOHNSON  
NATI ROEMER-BLOCK  
CAILUM HAEUSSLER**



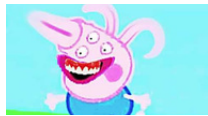
## Brooke Johnson:

My quadrant follows the theme of Paw Patrol. My quadrant is located in the southwest area of our map. My roads are called Adventure Bae Avenue and Lookout Lane. They are marked with the color red.



## Tiffany Zhang:

My quadrant follows the theme of Peppa Pig. My quadrant is located in the southeast area of our map. My roads are called Astley Street and Muddy Lane. They are marked with the color pink.



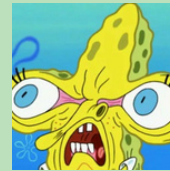
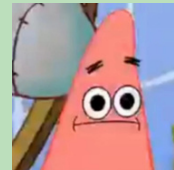
## Nati Roemer-Block:

My quadrant follows the theme of Sesame Street. My quadrant is located in the northwest area of our map. My roads are called Sesame Street and Puppet Parkway. They are marked with the color yellow.



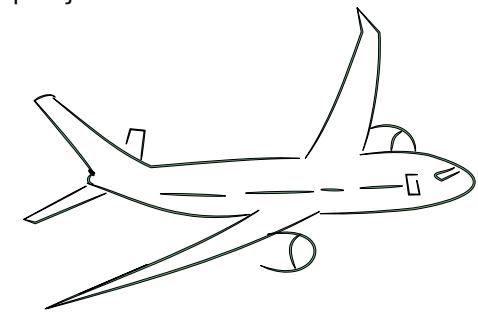
## Cailum Haeussler:

My quadrant follows the theme of SpongeBob Square Pants. My quadrant is located in the northeast area of our map. My roads are called Chum Bucket Boulevard and Pineapple Parkway. They are marked with the color blue.



## CONCLUSION

In conclusion, we learned a lot throughout this project. We learned that math can be a lot of fun, especially if you have a group that communicates and works well together. Group projects are often difficult because there are people who don't complete their part. However, I think it worked out pretty well this time. We also learned that not everything will always go to plan, but you just have to go with it. We were very productive throughout the entire timeline, and we are all happy with how this project turned out.



# WELCOME!

Welcome to Peppa's Hometown! Her hometown was designed by the cruel architect, Tiffany Zhang (who really enjoys dark humor). We have 2 streets that are parallel to one another, Astley Street and Muddy Lane. They're also named after Peppa herself! This section of town is home to the freshest meat (only pig) source, Daddy Pig's Butcher Shop, and Grandpa Pig's Meat Factory! We also have our lovely Emily Elephant's Ivory Factory and Gerald Giraffe's Zoo! Additionally, we have our hospital named after Mandy the wheelchaired mouse. Enjoy your visit!



## ATTRACTIONS



- 1) Daddy Pig's Butcher Shop
- 2) Grandpa Pig's Meat Factory
- 3) Mandy Mouse's Hospital
- 4) Madame Gazelle's School
- 5) Peppa's Muddy Puddle
- 6) Pedro's Glasses Shop
- 7) George's Toy Shop
- 8) Emily Elephant's Ivory Factory
- 9) Gerald Giraffe's Zoo
- 10) Freddie Fox's Warehouse



### Visitor's Guide

## PEPPA'S HOMETOWN

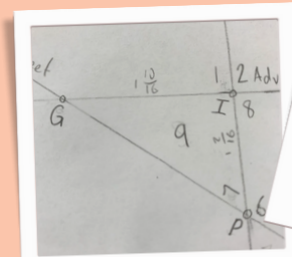


OINK!

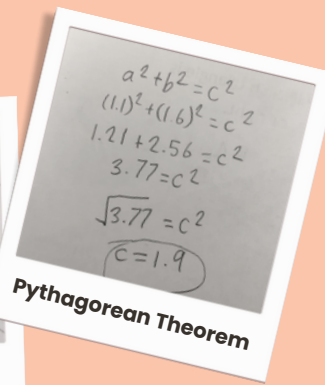
TIFFANY ZHANG

# Instructions

- Hold the paper so that the longer side runs horizontally
- Childhood Court runs across the top of the page.
- Adventure Bay Ave runs horizontally across the center of the quadrant.
- About 4.5 inches to the left of the east side, Astley Street intersects Adventure Bay Ave to the east and creates perpendicular lines.
- About 3.75 inches to the left of Astley Street, Muddy Lane intersects Adventure Bay Ave at a 90-degree angle.
- Muddle Lane and Astley Street are parallel lines.
- Sesame Street creates a transversal with Astley St and Muddy lane, starting from the northwest corner to the southeast corner.
- Sesame Street also creates intersecting lines with every other road (Astley St, Adventure Bay Ave, and Muddy Lane).
- Gerald Giraffe's Zoo (9) occupies a plot of land, in the shape of a right triangle, created by Adventure Bay Ave, Astley St, and Sesame Street.
- Peppa's Muddy Puddle (5) occupies the other triangular plot of land.
- At the intersection created by Astley St and Adventure Bay Ave, Grandpa Pig's Meat Factory (2) is located at the right angle to the northeast.
- Grandpa Pig's Meat Factory (2) creates a linear pair with Daddy Pig's Butcher Shop (1) to the north.
- Daddy Pig's Butcher Shop (1) and Emily Elephant's Ivory Factory (8) are vertical angles.
- If Adventure Bay Ave is the transversal, Emily Elephant's Ivory Factory (8) and Freddie Fox's Warehouse (10) are alternate exterior angles.
- If Adventure Bay Ave is the transversal, Daddy Pig's Butcher Shop (1) and Madame Gazelle's School (4) are alternate interior angles.
- Directly to the south of Adventure Bay Ave, on Sesame Street, Pedro's Glasses Shop (6) lies on the obtuse angle.
- To the west of Pedro's Glasses Shop (6), George's Toy Shop (7) lies on the acute angle.
- Pedro's Glasses Shop (6) and George's Toy Shop (7) are adjacent angles.
- If Sesame Street is the transversal, Mandy Mouse's Hospital (3) and Pedro's Glasses Shop (6) are corresponding angles.
- If Sesame Street is the transversal, Mandy Mouse's Hospital (3) and George's Toy Shop (7) are alternate exterior angles.



The Zoo's Side Lengths

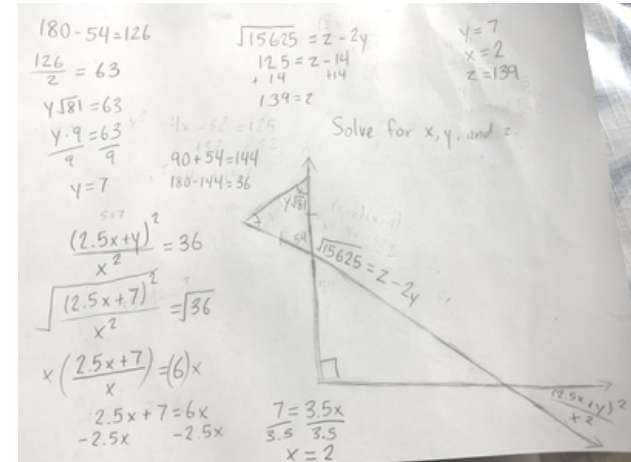


Pythagorean Theorem

STATEMENTS	EXPLANATIONS
$PI = 1.1, IG = 1.6$	Given
$a^2 + b^2 = c^2$	Pythagorean Theorem
$(PI)^2 + (IG)^2 = c^2$	Substitution
$(1.1)^2 + (1.6)^2 = c^2$	Substitution
$1.21 + 2.56 = c^2$	Simplify
$3.77 = c^2$	Combine like terms
$c = 1.9$	Square root

In the context of this problem,  $c$ , or 1.9, is the length of the longest side created by Adventure Bay Avenue, Sesame Street, and Astley Street.

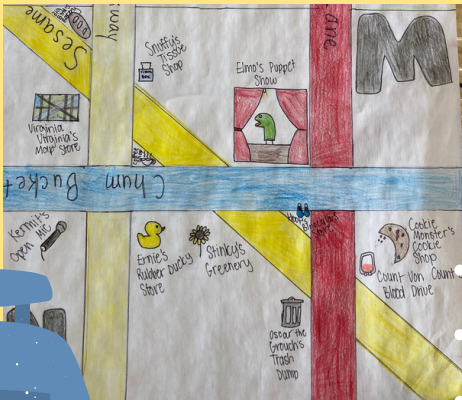
# TRIANGLE SUM / EXTERIOR ANGLE THEOREM



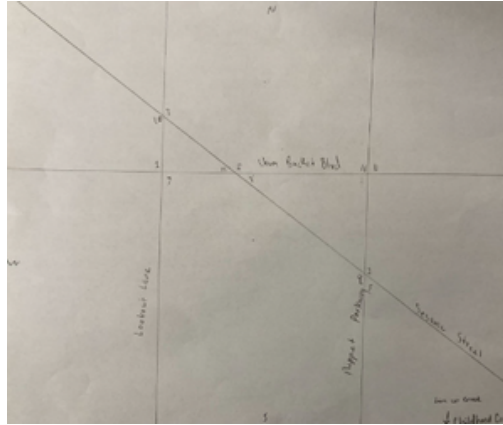
Firstly, I know that the angles in a triangle add up to 180 because of the Triangle Angle Sum Theorem. In the small triangle, an angle, of 54, is given. I then subtracted 180 from 54 and got 126. Then I divided 126 by 2 because the other 2 angles are equivalent and got 63. Next, I set up the equation  $y/81 = 63$ . Then I solved for  $y$  and got 7. Next, I substituted  $y$  into the equation  $(2.5x + y)^2 = 36$  and solved for  $x$ . I found out that  $x$  was 2. Afterward, I substituted  $y$  into the equation  $15625 = z - 2y$ . I found that  $z$  was equivalent to 139. Although, you could use the Exterior Angle Sum Theorem to find  $z$  as well. And therefore,  $x = 2$ ,  $y = 7$ , and  $z = 139$ .

# WELCOME!

Enjoy your stay on Sesame Street. If you ever get lost, head towards Virginia Virginia's Map Store and they will tell you how to get around. If you are feeling a bit hungry after that you can go to Cookie monsters cookie store where they make your cookies right in front of you. Getting a bit bored? You can head to the puppet show where you can watch our funniest characters perform.



# ATTRACTIONS



- **Cookie Monster's Cookie Store**
- **Virginia Virginia's Map Store**
- **Oscar The Grouch's Trash Dump**
- **China's Shop**
- **Big Bird's Bakery**
- **Kermit's Open Mic**
- **Elmo's Puppet Show**
- **Stinky's Greenery**
- **Snuffy's Tissue Shop**
- **Count Von Count's Blood Drive**
- **Ernie's Rubber Ducky Store**
- **Hoot The Owl's Binoculars Store**

Visitor's Guide

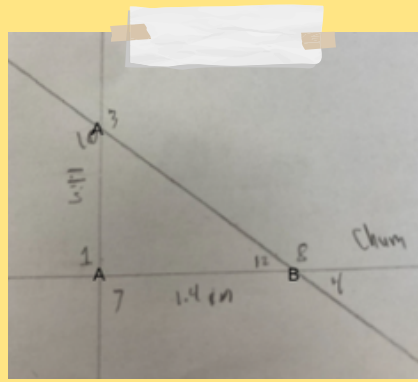
# BIG BIRD'S VILLAGE



TWEET!

NATI ROEMER-BLOCK

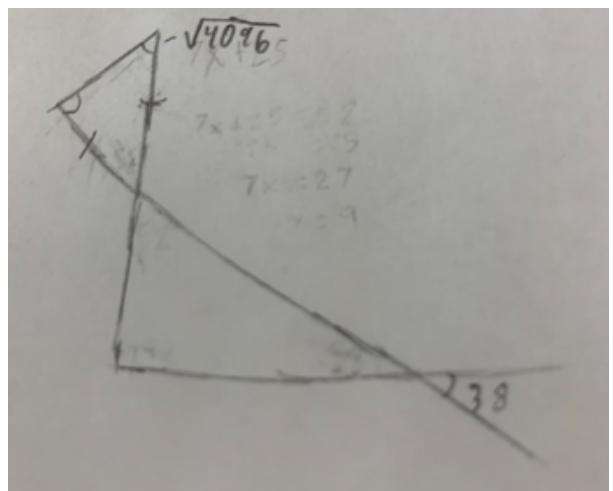
- Instructions:
- Lookout lane and puppet parkway roads going north to south are parallel to each other. Lookout lane is more to the west side and puppet parkway is more to the east side.
- Chum bucket Blvd is perpendicular to Lookout Lane and Puppet Parkway. It is in the northern half of the quadrant.
- Sesame Street, is a transversal through Lookout Lane and Puppet Parkway that starts in the northwest corner and goes to the southeast corner. It forms a small triangular plot of land with Lookout Lane and Chum Bucket Blvd
- The last road, Childhood Court, is on the southern edge of the paper. It runs from west to east.
- Cookie Monster's cookie store (1) is in the northwest corner of the intersection of Lookout Lane and Chum Bucket Blvd.
- Elmo's puppet show (7) is a vertical angle to Cookie Monster's cookie store (1).
- With Chum Bucket Blvd as a transversal Elmo's puppet show (7) and Ernie's Rubber ducky store (11) are alternate interior angles.
- Kermit's open mic (6) is a linear pair with Ernie's Rubber ducky store (11) in the northeast corner.
- In the intersection between Sesame Street and Chum Bucket Blvd Stinky's greenery (8) is the north obtuse angle.
- Stinky's greenery (8) and China's shop (4) are a linear pair. China's shop (4) is at the east acute angle.
- Hoot the Owl's binoculars store (12) and China's shop (4) are vertical angles.
- If Sesame Street is the transversal Hoot the Owl's binoculars store (12) and Count Von Count's Blood drive (10) are corresponding angles.
- Count Von Count's Blood drive (10) and Oscar the grouch's trash dump (3) are vertical angles.
- With Puppet Parkway as a transversal Kermit's open mic (6) and Virginia Virginia's Map store (2) are corresponding angles.
- Virginia Virginia's Map store (2) and Big Bird's bakery (5) form a linear pair. Big Bird's bakery (5) is at the southeast corner.
- Big Bird's bakery (5) and Snuffy's tissue shop (9) are vertical angles.



<b>AB=1.1 in BC=1.4 in</b>	<b>Given</b>
<b>a<sup>2</sup>+b<sup>2</sup>=c<sup>2</sup></b>	<b>Pythagorean Theorem</b>
<b>(AB)<sup>2</sup>+(BC)<sup>2</sup>=(CA)<sup>2</sup></b>	<b>Substitution</b>
<b>(1.1)<sup>2</sup>+(1.4)<sup>2</sup>=(CA)<sup>2</sup></b>	<b>Substitution</b>
<b>1.21+1.96=(CA)<sup>2</sup></b>	<b>Simplify</b>
<b>3.17=(CA)<sup>2</sup></b>	<b>Simplify</b>
<b>1.78=CA</b>	<b>Simplify</b>

In the context of this problem, CA (1.78) is the length of the longest side, or the hypotenuse, formed by Sesame Street, Chum Bucket Boulevard, and Lookout Lane.

# Triangle Angle Sum Theorem



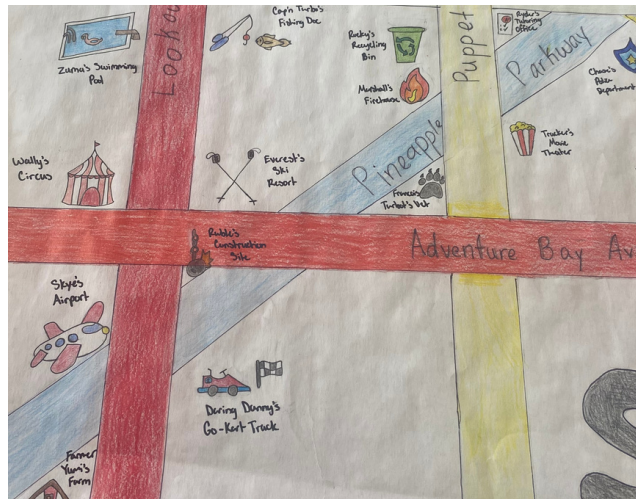
To solve my problem first you need to know the square root of 4096 (It's 64). Then you notice that two of the lines in the triangle with a 64 degree angle are congruent. That can tell us that the angle of the other congruent line is also 64. Then we use the triangle angle sum theorem and see that the other angle must be 52. Then we go to the other side of the triangle and see a vertical angle which means that the other angle is also 38. Then we use the triangle angle sum theorem to find out that the last angle is 90 degrees.

# WELCOME!

Welcome to *Adventure Bae*, also known as the home of the Paw Patrol pups! In my quadrant, I decided to focus on things that related to each of the pups special talents to help keep our Childhood Cartoon map safe! For example, Zuma is the water rescuer, so his special attraction is a swimming pool. The Paw Patrol quadrant is located in the southwest quarter of our town, with two roads, *Adventure Bae Avenue* and *Lookout Lane*, dedicated just to them. These roads are colored different shades of red for your convenience. The Paw Patrol quadrant is filled with fun and practical activities and business to ensure you have a great time in our town! Wally's Circus and Tracker's Movie Theater are great options for a bit of fun for our residents and visitors. We also installed Chase's Police Department and Marshall's Firehouse so more disastrous incidents can no longer harm our town. Please enjoy your stay!

- Brooke J

## ATTRACTIONS



- Marshall's Firehouse
- Chase's Police Force
- Zuma's Swimming Pool
- Rubble's Construction Site
- Everest's Ski Lift
- Skye's Airport
- Rocky's Recycling Bin
- Wally's (Seal) Circus
- Ryder's Tutoring Office
- Tracker's Movie Theater
- Cap'n Turbot's Fishing Dock
- Farmer Yumi's Farm
- Francois Turbot's Vet

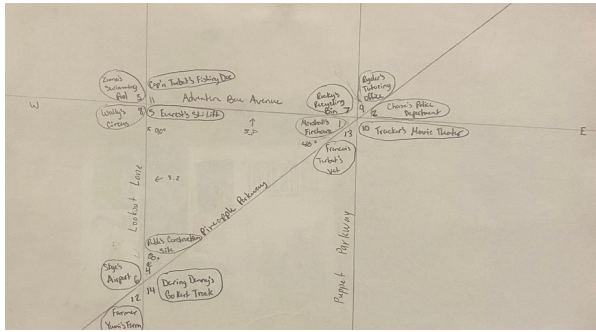
### Visitor's Guide

# ADVENTURE BAE

By: Brooke Johnson



# TOWN DIRECTIONS



## Road Direction-

Adventure Bae Avenue runs through the center of the town going from the west to the east.

Lookout Lane runs from the north into the south. Puppets Parkway runs from the north into the south. Pineapple Parkway starts at the southwest corner and runs into the northeast.

## Town Instructions-

Parallel Lines: Lookout Lane and Puppets Parkway

Perpendicular Lines: Adventure Bae Avenue and Puppets Parkway

Intersecting Lines: Lookout Lane, Pineapple Parkway, and Adventure Bae Avenue

Obtuse Angle: Point 14 (Daring Danny's Go Kart Track)

Acute Angle: Point 4 (Ruble's Construction Site)

Right Angle: Point 11 (Cap'n Turbot's Fishing Dock)

Right Triangle: Made from points 1, 4, and 5 (Marshall's Firehouse, Ruble's Construction Site, and Everest's Ski Lift).

Linear Pair: Angles 6 and 7 (Skye's Airport and Rocky's Recycling Bin)

Consecutive Angles: Angles 13 and 14 (Francois Turbot's Vet)

Corresponding Angles: Angles 12 and 13 (Farmer Yumi's Farm)

Transversal: Pineapple Parkway

Alternate Interior Angles: Angles 1 and 14 (Marshall's Firehouse and Daring Danny's Go Kart Track).

Alternate Exterior Angles: Angles 10 and 3 (Tracker's Movie Theater and Zuma's Swimming Pool).

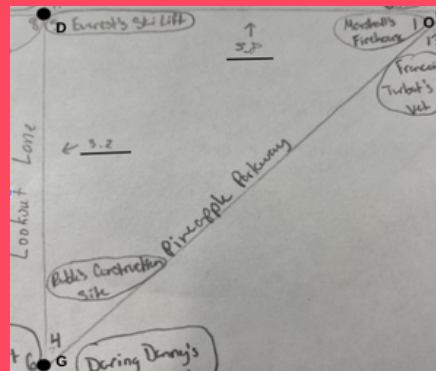
Adjacent Angles: Angles 8 and 5 (Wally's Circus and Everest's Ski Lift).

Vertical Angles: Angles 8 and 11 (Wally's Circus and Cap'n Turbot's Fishing Dock).

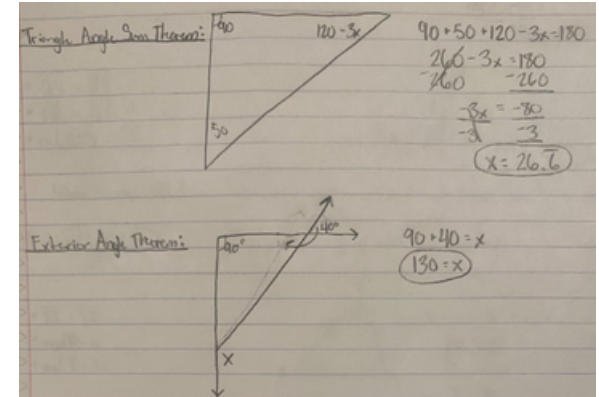
# Pythagorean Theorem

I used the pythagorean theorem to find the length of the hypotenuse for the triangle that is formed from the roads Lookout Lane, Pineapple Parkway, and Adventure Bae Avenue (points D, O, and G)

$DO = 3.8, DG = 3.2$	Given
$a^2 + b^2 = c^2$	Pythagorean Theorem
$DO^2 + DG^2 = OG^2$	Substitution
$3.8^2 + 3.2^2 = OG^2$	Substitution
$14.44 + 10.24 = OG^2$	Simplify
$24.68 = OG^2$	Combine Like Terms
4.97	Square Root (Rounded)



# Angle Sum Theorems



As you can see, I have two problems related to the angle sum theorems.

The first problem is an example of Triangle Angle Sum Theorem. In order to correctly solve this problem, you must know that the total of the triangle had to be 180. So, you look at the angles and add/subtract them on one side of an equal sign, and have 180 on the other side. Next, you have to combine like terms to get  $260 - 3x = 180$ .

Then, you subtract 260 from both sides to get  $-3x = -80$ . Finally, you divide by negative 3 on both sides to get  $x$  by itself. When you do, you find that  $x = 26.6$  repeating.  $x$  is a positive number because two negatives cancel each other out to make a positive.

My second problem is an example of Exterior Angle Theorem. In order to solve this problem, you must know that the equation is that the angles given in the triangle are equal to the angle outside of the problem. In this particular case, your first step must be to move the 40 degrees into the triangle because it is a vertical angle, so you know it is the same as the outside angle. Then, you set up your equation to be  $90 + 40 = x$ . Finally, you combine like terms to find that  $x = 130$ .