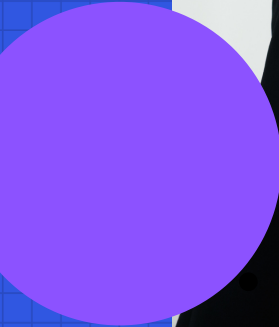
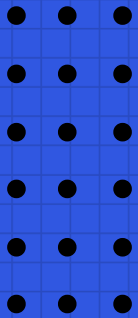


Black Girl MATHgic presents...
secure the bag (part II)



12TH ISSUE
JUNE 2020



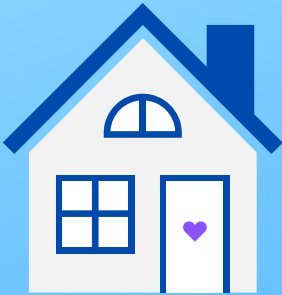
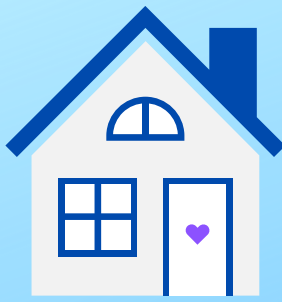
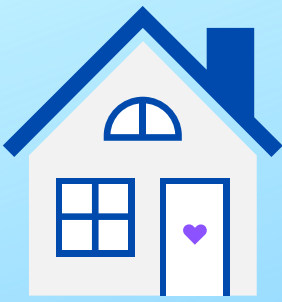
KEEP IT REAL



Keeping it real...estate, that is!
Did you know June is National Homeownership Month? What better time to dig into real estate and all the math in the house?! Real estate and homeownership has helped many people build wealth and **#SecureTheBag**. So, FLIP these pages and SHOW yourself what you got!



blackgirlmathgic



**assume homes with no sign are occupied*



What fraction of the homes above have been sold?



What fraction of the homes above are occupied?*



If the answer is $\frac{1}{9}$, what could the question be?

Home Sweet Home

A family is in the market for a new home and they come to you for your real estate expertise! The family consists of 4 people (2 adults and 2 children). They also have a baby on the way. They want each child to have their own room. Plus, they have a dog. They don't want to spend more than \$250,000, but are willing to go over that a little for the right home. They love granite counters in the kitchen and finished attic spaces for extra storage. Review each house below and then use the next page to make your recommendation!



House #1

Price: \$210,000

Bedrooms: 5 * Bathrooms: 4.5

Amenities include: large backyard, full basement, kitchen includes granite counters, tiled backsplash, tons of cabinet space, and stainless steel appliances. Large deck overlooks backyard so you can watch the kids and pets play. 3 floors.



House #2

Price: \$164,900

Bedrooms: 3 * Bathrooms: 2

Amenities include: Gorgeous hardwood floors throughout home. Kitchen has white cabinets, stove, dishwasher, view to family room and back porch. Master bath includes separate tub and shower. Private, fenced backyard has a fire pit for family fun. 2 floors.



House #3

Price: \$251,900

Bedrooms: 6 * Bathrooms: 5

Amenities include: Cozy library/office area, elegant dining room, and a grand living room with fireplace. Basement showcases a full kitchen, as well as the laundry room and plenty of storage space. Finished attic allows for even more storage space, or could be converted into a living space. Backyard includes breathtaking landscaping. 3 floors.

Home Sweet Home

A family is in the market for a new home and they come to you for your real estate expertise! The family consists of 4 people (2 adults and 2 children). They also have a baby on the way. They want each child to have their own room. They also have a dog. They don't want to spend more than \$250,000, but are willing to go over that a little for the right home. Review each house on the previous page and discuss your recommendation below!



Which house do you recommend for the family? Circle it above.

I recommend House #_____.

List 2-3 factors that went into your decision. Why did you recommend that house for the family?

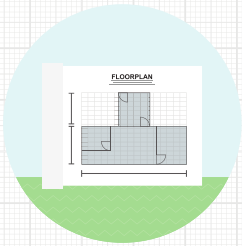
List 2-3 factors that went into your decision to NOT recommend the other 2 homes.

I'm Floored

When searching for a home, buyers often look at the home's floor plan. Floor plans are visual representations of a room, viewed from above. They show the sizes of each room and help realtors and buyers determine whether the house is the right size for their needs. How are those rooms measured? With area and perimeter! (There's math creeping up on you in real life again ;-))

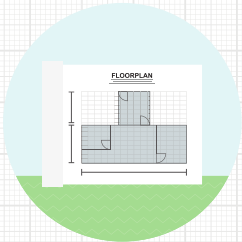
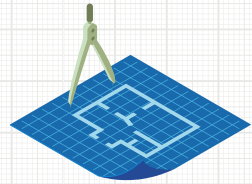
Grab the graph paper inside of your new folder. Use it to complete the activities below.

Scale: One square on the graph paper = 1 foot.



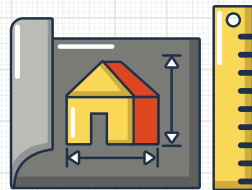
Draw a room that has a length of 6 feet and a width of ___ feet. (Fill in the blank with your favorite number between 2 and 5). What is the area? What is the perimeter?

Draw a square-shaped room that has an area of 25 square feet AND a perimeter of 20 feet. What is the length and width?



Your favorite room has an area of 24 square feet. What are two possible dimensions for this room? Draw them!

Another room is shaped like a square and has a perimeter of 36 feet. What is the length, width and area of the room?





#HomeownerLife

I started with \$_____

What happened?	Now I have:
Spent \$400 on a new dishwasher	
Paid \$75/hour for 2 hours of landscaping work	
Received \$1150 rent payment from tenant	
Bought new patio furniture for the backyard - \$168	

Now, I have \$_____*

**your number should be an even number that is divisible by 2, 4, 6 and 8*

A portrait of a young Black woman with long, multi-colored dreadlocks (purple, blue, and yellow) smiling warmly. She is wearing a bright yellow top. The background is a soft, out-of-focus grey.

In The House with Sarabella

"Mathematics is everywhere. It shapes the whole world; from the shape of a stop sign, to the weight of bananas at the grocery store, numbers are literally everywhere. When you start to understand that and think about it in those terms, you're already wonderful at math."

1. Sarabella sells a house for \$100,000. Her commission, or payment for the sale of the house, is 6% ($\frac{3}{50}$ in fraction form). How much did she make on the sale?

2. Sarabella shows you a home that you love, but it has hardwood floors. After you move in, you decide to install carpet in your home office. If the home office is in a rectangular room that measures 16 feet along one wall and 12 feet along the adjacent wall, how many square feet of carpet would be required to cover the floor?

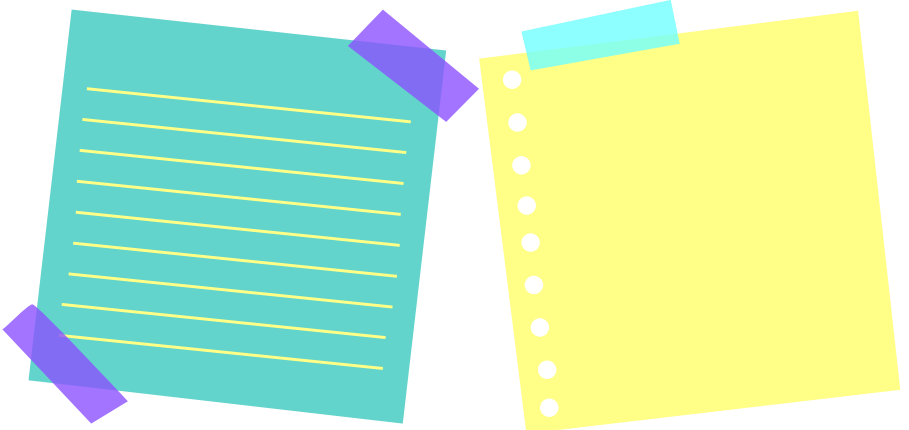
3. If carpet is on sale for \$7.75 per square foot, about how much would it cost you to carpet the room from question #2?

4. You sold your home for \$139,500, which was \$32,850 more than what you originally paid for it. What was your original cost for the home?



Enjoyed these activities? Want more? Below are a few more ways you can keep practicing math + real estate/homeownership!

- Visit a real estate website like Trulia.com or Zillow.com and find houses you like. Look at numbers like bedrooms, bathrooms, square feet, price, etc. Make your own word problems!
- Play fun board games that teach money management and wealth building like the Black Wall Street board game or Sense 2 Cents Financial Literacy board game (there's information about these games in the Caring Adult Guide, so ask your Caring Adult for more details!)
- Google "careers in real estate" and read 2-3 articles and/or watch 1-2 videos about all the cool jobs you can have in the real estate world. Are there any that stand out to you?
- History + Math lesson: Research **redlining**. Not too long ago, people of color were often denied the opportunity to buy homes because of a practice called "redlining." This discriminatory practice was called redlining because the government and banks would literally draw a red line on a map around the neighborhoods they would not invest in, based on demographics alone. Black inner-city neighborhoods were most likely to be redlined. Redlining is now illegal, but its effects are still felt today. (source: investopedia.com, npr.org)



“That’s really what wealth does for you. It gives you freedom to make choices.” — Oprah

A quote from Oprah, one of the wealthiest people in the world, seemed like a good thing to include in part 2 of our Secure The Bag series!

Real estate has helped lots of people build wealth, whether they were the real estate investors buying and flipping homes, the buyers purchasing homes and renting them out, or the real estate agents buying different properties (and these are just a few of the careers in real estate - see the previous page for an activity you can do to learn about other careers in real estate).

Is it all about the money, though? Is that the only reason to build wealth? Of course, the money is nice. But, there are other things that wealth buys. One of them, like Oprah said, is the freedom to make choices. That could be a choice around how much time you get to spend with your family, how many vacations you take (fun times on the beach, anyone?), what types of organizations you donate to or even what kind of food you eat!

But before you get to the wealth -- you must get to work. There are no shortcuts to success.

Brittany | Founder, Black Girl MATHgic | brittany@blackgirlmathgic.com | [@blackgirlmathgic](https://www.instagram.com/blackgirlmathgic)





YOU'VE
GOT THE
POWER



blackgirlmathgic