

Thrilling Math Problems for You!

Down at Liam's Barber shop, things are really hopping! Birdie had an 8:30 appointment and she arrived a 37 minutes early. Liam eyed her hair. "So, what would you like today, Madam?"

"Just a trim," replied Birdie.

"Okey dokey," chuckled Liam merrily. He proceeded to cut $\frac{2}{3}$ of her hair, which had been $7\frac{1}{2}$ inches long, just moments before. Looking in the mirror with horror, Birdie screamed, "My hair!!! I said, "A trim!" you, you, you...aaaahhhhhh!" She ran to a display of shampoo bottles and started throwing them at Liam. She threw all 32 bottles. Liam dodged $\frac{3}{4}$ of them, but the rest found their target.

"Madam...ow! Madam, I'm not finished yet!"

"I'm never coming back here again!" she bellowed. She took Liam's favorite cookie plate, which had a radius of 4 inches, and frisbeed it across the shop. Then, she stomped out.

"Oh, you'll be back..." muttered Liam. "You'll see..."

Liam's next customer was Loree, who needed hair extensions for her dance performance that afternoon. With a masterful touch, Liam added $2\frac{7}{8}$ inches to her $5\frac{3}{4}$ inch long, brown hair.

"Oh, it feels wonderful," she sang, spinning around to look in the mirror. Then she freaked. "These extensions are green! I can't go on stage like this!"

Liam was irritated. Two fussy customers in a row! "Hey, what's wrong with green?!" he said, looking to his barber buddy Logan for support.

"Yeah. That green looks nice. Real nice," said Logan.

"You have ruined my hair!" Loree growled. "I was going to get you discount tickets for the show, too. They're usually \$29.99, but I could get a 20% discount. You would have saved a lot." With that, she stomped out of the barber shop.

"It would have been nice to go to the dance," said Logan. "It's cool."

"Yeah, well, I'm heading out to the playground right after work," replied Liam, snipping his scissors. "Who's next!"



Liam's barbershop does serious business...

1. What time did Birdie arrive at the shop?
2. Birdie lives far away from the shop. If it took her 2:45 to drive there, what time did she leave home?
3. What was the circumference of Liam's cookie plate?
4. What was the area of that plate?
5. How many shampoo bottles hit Liam?
6. How long was Loree's brown and green hair?
7. How much would the guys have saved per ticket?
8. How long was Birdie's hair when Liam was finished?