

Fraction mixed operations word problems

Grade 5 Word Problems Worksheet

Gerry was working in a barber shop.

1. In 36 minutes, Gerry cut $5\frac{1}{5}$ cm from his customer Sarah's hair. Sarah's hair is now $48\frac{3}{4}$ cm long. How long was her hair before cutting?
2. Gerry is checking to see how many customers the barbershop had in the past 2 weeks. On the list, there were 217 customers during the past 2 weeks, and $\frac{5}{7}$ of them were men. How many of the customers were men?
3. The hairspray bottle in the barbershop contains $255\frac{2}{3}$ ml. It releases 5 ml per spray. If he used up $125\frac{4}{6}$ ml of hairspray for his 5 customers yesterday, how many sprays will he get from what's left in the bottle?



4. He rented a 50 square meter commercial lot for the second branch of his barbershop. He is paying 6 dollars and a quarter per square meter monthly. How much will he pay for a year?

5. One of the services offered by Gerry's barber shop is hair blackening. Jack waited for 2 customers to finish for $1\frac{5}{6}$ hours before his turn. It took $1\frac{1}{3}$ hours to blacken his hair. How much time did Jack spend at the barber shop?

6. Richard's beard gets longer by $\frac{4}{5}$ cm every 2 months. How long will his beard grow in one month? How many trims will he need in $2\frac{1}{2}$ years if he trims every 3 months?

Answers

1. $5\frac{1}{5} + 48\frac{3}{4} = 53\frac{19}{20}$

Sarah's hair was $53\frac{19}{20}$ cm long before the haircut.

2. $217 \times \frac{5}{7} = 155$

155 of the customers in the past two weeks were men.

3. $255\frac{2}{3} - 125\frac{4}{6} = 130$ ml of hairspray left

$$130 \div 5 = 26$$

Gerry will get 26 sprays from what's left in the bottle.

4. $50 \times 6\frac{1}{4} = 50 \times \frac{25}{4} = 312\frac{1}{2}$

He is paying $312\frac{1}{2}$ dollars per month.

$$312\frac{1}{2} \times 12 = 3,750$$

His annual rental fee is \$3,750.

5. $1\frac{5}{6} + 1\frac{1}{3} = 3\frac{1}{6}$

Jack spent $3\frac{1}{6}$ hours at the barber shop.

6. $\frac{4}{5} \div 2 = \frac{2}{5}$

Richard's beard will grow $\frac{2}{5}$ cm in a month.

$$2\frac{1}{2} \text{ years} = 30 \text{ months}$$

$$30 \div 3 = 10$$

He will need 10 trims in $2\frac{1}{2}$ years.