Multiplying and Dividing with Fractions Word Problems

1. Mrs. Smith bought $3\frac{1}{2}$ yards of yellow fabric. She used $\frac{2}{3}$ of the fabric to make a chicken costume. How much fabric did she use?

 $3\frac{1}{2}$ yards = $\frac{7}{3}$ yards = $\frac{2}{3}$ is used. 是 6 美 = 是 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 3 :. She used 2 = yards

2. Julie studied for $3\frac{1}{3}$ hours during the 4 days before her last math test. If she studied for the same amount of time each day, how much time did she spend studying each day?

3 = 10 during 4 days => so each day 50 to the 56 minutes 200 minutes 3 h — 4 days (10 hours 10 hours × - 1 days (12) perday

3. An aquarium holds $6\frac{1}{4}$ gallons of water. The water level dropped to $\frac{4}{5}$ of this amount. How much water should be added to full the aquarium?

6 4 gallons . 4 = 25 = 5 gallons 6 4 gallons - 5 gallons = 1 4 gallons legt . 5 gallons need to be added

4. A piece of plywood 24 inches wide is cut into strips $2\frac{1}{2}$ inches wide. How many strips of this width can be cut?

$$24 \div 25 = 24 \div 5 = 48$$

$$= 9.6 \Rightarrow 9\frac{6}{10} = 9\frac{3}{6}$$

9 Strips

5 Sean used 3 cum of sugar to make a doma become
5. Sean used $\frac{3}{4}$ cup of sugar to make a dozen brownies. How many sugar is in each brownie?
$\frac{3}{4}$ Cup for 12 Exomises $\left\{\frac{1}{10}\right\} = \frac{3}{48}$
? _ 1 brownie Cupt
$\frac{3}{4} \text{ Cup for 12 beownies}$ $\frac{3}{4} \text{ Cup for 12 beownie}$ $\frac{1}{7} - \frac{3}{48}$ $\frac{3}{4} \text{ brownie} \cdot 1 \text{ cup}$ $\frac{3}{4} \text{ brownie} \cdot \frac{3}{4} \cdot \frac{12}{4} \cdot \frac{3 \times 1}{4 \times 12}$ $\frac{3}{4} \text{ brownie} \cdot \frac{3}{4} \cdot \frac{12}{4 \times 12} \cdot \frac{3 \times 1}{4 \times 12}$
6. A gasoline pump delivers $4\frac{1}{5}$ gallons of gas per minute. How many minutes will it take to fill a
gas tank that holds $16\frac{1}{2}$ gallons? $4\frac{2}{5} = \frac{22}{5}$ gallons /minutes
$=\frac{165}{44}$ $=\frac{165}{44}$ $=\frac{165}{2}$ $=\frac{165}{2}$ $=\frac{33}{2}$
$=\frac{165}{44}$ minute $=\frac{33}{2}$ gallons $=\frac{33}{4}$ minutes
= 33 minutes
7. Six Flags Amusement Park has found that $\frac{3}{5}$ of its customers ride the Colossus roller coaster. Of
these, $\frac{1}{4}$ ride it again. What fraction of the customers ride the roller coaster twice?
$\frac{3}{5}$ % $\frac{1}{4} = \frac{3}{5}$ $\frac{1}{4} = \frac{3}{20}$ So 3 out of 20 customers pide it twice
5 7 20 Ride 11 Twice
8. Bill earned \$45 at Happy Days Drive-In. He spent $\frac{1}{3}$ of the money on gas for his car and $\frac{1}{5}$ of it
on flowers for his girlfriend. How much money does he have left for the big date?
\$45 -> 3 on gas and 5 on plowers
45. \frac{1}{3} = \frac{45}{3} = \frac{9}{3} = \frac{9}{3} = \frac{1}{3} = \frac{9}{3}
Money left= $45 - (15 + 9) = 45 - (24)$ = \$21
= \$21
\$21 left for the date