13) The ratio of red to blue socks in a drawer is 8:12. If there are 80 socks in the drawer, how many are blue?

$\frac{Red}{Blue} = \frac{8}{12}$ 12 blue / 20 total $\frac{12}{20} = \frac{x}{80}$ ×4 ×4

x = 48 blue socks

14) The ratio of boys to girls in a class is 4:5. If there are 36 total kids in the class, how many boys are in the class?

$\frac{B}{G} = \frac{4}{5}$ $\frac{B}{T} = \frac{4}{9}$ $\frac{4}{9} = \frac{x}{36}$ ×4

x = 16 boys

15) There are 80 people eating in a Chinese restaurant. If 25% of these people did **NOT** order an eggroll, how many people did order an eggroll?

IF 25% DID NOT EAT AN EGGROLL, THEN 75% DID EAT AN EGGROLL

DID EAT / TOTAL $\frac{x}{80} = \frac{75}{100} \div 25 \div 25 = \frac{3}{4}$ ⇒ rewrite $\frac{x}{80} = \frac{3}{4}$ ×20

x = 60 people

16) Janiah went out to dinner with her friends and had great service. She wanted to leave a 20% tip on her $39 bill. How much money will she leave as a tip?

$\frac{20}{100} = \frac{x}{39}$ $20 \cdot 39 = 100x$ $\frac{780}{100} = \frac{100x}{100}$

100 | 780.0 → 7.8

39 × 20 = 780

$7.80

17) The prices of 3 different bottles of shampoo are given in the table. Which size bottle is the **cheapest**, according to the price per ounce?

25 | 5.25 → .21 (50, 25, 0)

15 | 2.40 → .16 (15, 90, 90, 0)

5 | 1.00 → .20 (10, 00, 0)

Size	Price	Price per 1 ounce
25 ounces	$5.25	$.21/oz.
15 ounces	$2.40	$.16/oz.
5 ounces	$1.00	$.20/oz.

15 oz bottle is cheapest because it has the lowest unit rate.

18) The weight of an elephant is 13 kg. How many grams does the elephant weigh? *(1 kg = 1000 g)*

$\frac{13\,kg}{x\,g} = \frac{1\,kg}{1000\,g}$ 13 × 1 kg = 13 × 1000

x = 13,000 g

19) Seventy liters of soda were served at a party. How many kiloliters were served? *(1000 L = 1 kL)*

$\frac{70\,L}{x\,kL} = \frac{1000\,L}{1\,kL}$ $\frac{70}{1000} = \frac{1000x}{1000}$

.07 kL

1000 | 70.00 → .07 (7000)

20) If 1 Ton is equal to 2,000 pounds, how many Tons are equal to 17,000 pounds?

$\frac{17{,}000\,lbs.}{x\,Tons} = \frac{2000\,lbs.}{1\,Ton}$ $17{,}000 = 2000x$

8.5 Tons

2000 | 17,000.0 → 8.5 (16,000, 10000, 18000)

21) The table shows survey results of the favorite desserts of 6th graders. What is the simplified ratio of those who selected ice cream **and** cake **to** total?

Dessert	Ice Cream	Cookies	Cake	Pie	Brownies	Other
# Votes	15	13	5	2	8	7

= 50

15 + 5 = 20

$\frac{20}{50} = \frac{2}{5}$