

Tape Diagrams: A model of ratios (visual)

Given the ratio and one other quantity, you can figure out:

- The total # of both parts
- The total # of each part
- How many more or less of one part than the other

John was looking at his streaming music stats. The ratio of songs he liked to disliked was 5:2. If he listened to 56 songs total how many did he like?

Liked $5 \times \boxed{8} \boxed{8} \boxed{8} \boxed{8} \boxed{8} = 40$

Disliked $2 \times \boxed{8} \boxed{8} = 16$

11 liked 40 songs

$\frac{\text{Total \#}}{\text{\# of boxes}}$

$\frac{56}{7} = 8$



At the fair the ratio of male to females was 4:5. If there are 180 people at the fair how many males are there?

males $4 \times \boxed{20} \boxed{20} \boxed{20} \boxed{20} = 80$

females $5 \times \boxed{20} \boxed{20} \boxed{20} \boxed{20} \boxed{20} = 100$

80 males

$\frac{\text{Total \#}}{\text{\# of boxes}}$

$\frac{180}{9} = 20$



A store had 144 sodas, both diet and regular. The ratio of diet sodas to regular sodas was 8:4. How many diet sodas were there?

Diet $8 \times \boxed{12} \boxed{12} \boxed{12} \boxed{12} \boxed{12} \boxed{12} \boxed{12} = 96$

Regular $4 \times \boxed{12} \boxed{12} \boxed{12} \boxed{12} = 48$

96 diet sodas

$\frac{\text{Total \#}}{\text{\# of boxes}}$

$\frac{144}{12} = 12$

