



7th Grade Lesson 54

- I can use ratio boxes to organize the data in ratio word problems.
- I can use proportions to solve ratio word problems.

Ratio word problems can be solved using proportions.

The ratio of parrots to macaws was 5 to 7. If there were 750 parrots, how many macaws were there?

Ratio Box

	Ratio	Actual Count
parrots	5	750
macaws	7	m

$$\text{1050 macaws} \frac{5}{7} = \frac{750}{m}$$

$$5m = 7 \cdot 750$$

$$5m = 5250$$

$$m = 1050$$

In the auditorium the ratio of boys to girls was 5 to 4. If there were 200 girls in the auditorium, how many boys were there?

	Ratio	Actual Count
boys	5	B
girls	4	200

250 boys

$$4 \cdot B = 5 \cdot 200$$

$$4B = 1000$$

$$B = 250$$

$$\begin{array}{r} 4 \overline{) 1000} \\ \underline{8} \\ 20 \\ \underline{20} \\ 0 \end{array}$$

Calculate the ratio of ~~left-handed~~ ^{blue-eyed} students to ~~right-handed~~ ^{brown-eyed} students in this classroom.

	Ratio	Actual Count
blue-eyed	3	12
brown-eyed	1	4

3 to 1



Assignment:

Problem Set 54

3-4, 7-9, 11-12, 16, 21-24