

1. The ratio of boys to girls at the movie theater is 4 : 3. Draw a bar diagram for each of the following ratios.

a. Boys to Girls



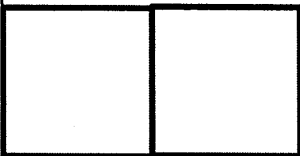
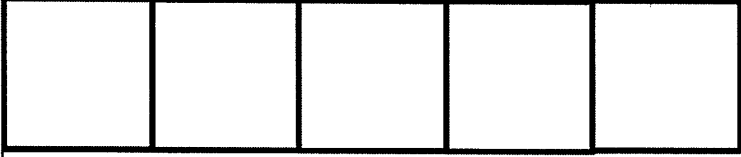
b. Girls to Total



c. Total to Boys



2. For every 2 sprinters on the school's track team there are 5 distance runners. Use the bar diagram to help you fill in the missing values in the equivalent ratios table?

	Sprinters	Distance Runners	Total
	2	10	
	14	50	
			84

3. At the local zoo, the ratio of reptiles to mammals is 4 : 7. If there are 32 reptiles, how many mammals are at the zoo?

4a. Write a ratio equivalent to 5 : 6 that has greater terms.

4b. Write a ratio equivalent to 30 : 75 that has lower terms.

5. A teacher kept track of what students consumed at a school picnic. For three grades, the ratios of the amount of water consumed to the amount of fruit juice consumed were equivalent. Complete the table.

Grade	Water (gallons)	Juice (gallons)
5th	6	7
6th	30	
7th	24	

6. The attendant at a parking lot compared the number of hybrid vehicles to the total number of vehicles in the lot over a weekend. The ratios for the three days were equivalent. Complete the table.

Day	Hybrids	Total
Fri.	3	8
Sat.		56
Sun.	27	

7. A baker uses 45 cups of flour and 54 cups of water for a recipe. The flour-to-water ratio is 45 : 54. How much water does the baker need if she uses only 5 cups of flour?

Flour	Water
45 cups	54 cups
5 cups	cups

8. The ratio of the weight of wood to the weight of raw materials used by a factory is 16 : 56. How many tons of wood would the factory use if it were to use 7 tons of raw materials?

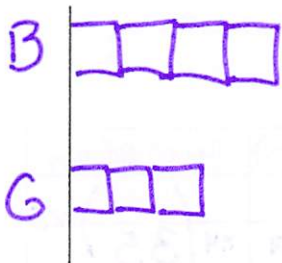
Wood	Raw Materials
16 tons	56 tons
tons	7 tons

Understanding Equivalent Ratios

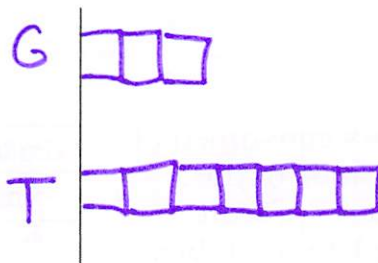
Name Key

1. The ratio of boys to girls at the movie theater is 4 : 3. Draw a bar diagram for each of the following ratios.

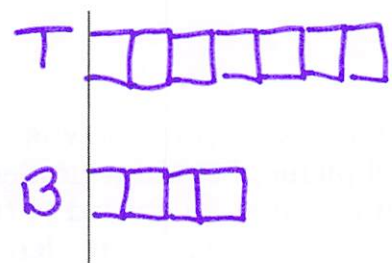
a. Boys to Girls



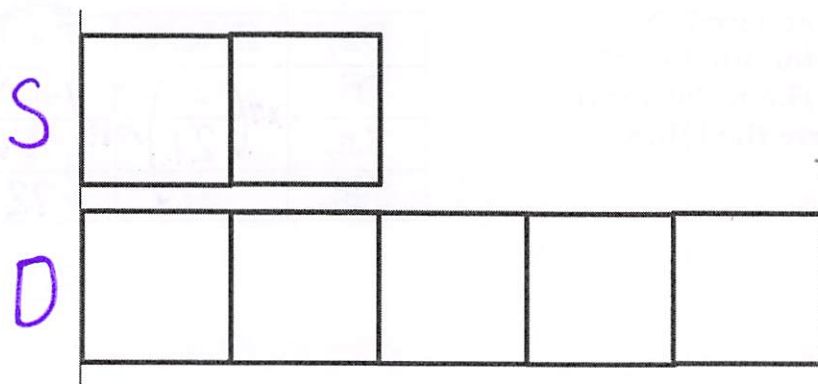
b. Girls to Total



c. Total to Boys



2. For every 2 sprinters on the school's track team there are 5 distance runners. Use the bar diagram to help you fill in the missing values in the equivalent ratios table?



Sprinters	Distance Runners	Total
2	5	7
4	10	14
14	35	49
20	50	70
24	60	84

Handwritten annotations: $\times 7$ (from 2 to 14), $\times 2$ (from 5 to 10), $\times 10$ (from 5 to 50), $\times 12$ (from 7 to 84).

3. At the local zoo, the ratio of reptiles to mammals is 4 : 7. If there are 32 reptiles, how many mammals are at the zoo?

R $\boxed{8 \ 8 \ 8 \ 8} = 32$

$32 \div 4 = 8$

M $\boxed{8 \ 8 \ 8 \ 8 \ 8 \ 8 \ 8} = 56 \text{ mammals}$

4a. Write a ratio equivalent to 5 : 6 that has greater terms.

10 : 12 or 50 : 60

4b. Write a ratio equivalent to 30 : 75 that has lower terms.

10 : 25 or 2 : 5

5. A teacher kept track of what students consumed at a school picnic. For three grades, the ratios of the amount of water consumed to the amount of fruit juice consumed were equivalent. Complete the table.

Grade	Water (gallons)	Juice (gallons)
5th	6	7
6th	30	35
7th	24	28

6. The attendant at a parking lot compared the number of hybrid vehicles to the total number of vehicles in the lot over a weekend. The ratios for the three days were equivalent. Complete the table.

Day	Hybrids	Total
Fri.	3	8
Sat.	21	56
Sun.	27	72

7. A baker uses 45 cups of flour and 54 cups of water for a recipe. The flour-to-water ratio is 45 : 54. How much water does the baker need if she uses only 5 cups of flour?

Flour	Water
45 cups	54 cups
5 cups	6 cups

8. The ratio of the weight of wood to the weight of raw materials used by a factory is 16 : 56. How many tons of wood would the factory use if it were to use 7 tons of raw materials?

Wood	Raw Materials
16 tons	56 tons
2 tons	7 tons