

1. The table shows the party affiliations of Senate members of the 109th Congress. What is the ratio of Republicans to Democrats? (12-1)

Party Affiliation	Number of Senators
Republican	55
Democrat	44
Independent	1

- A 4:9
B 5:9
C 4:5
D 5:4
2. A preschool has a student-teacher ratio of 5 to 2. Which of the following ratios is equal to this ratio? (12-2)
- A 45 teachers to 18 students
B 45 students to 18 teachers
C 35 students to 10 teachers
D 10 students to 7 teachers
3. In order to make a special color of purple, Sydney mixed 12 pints of red paint and 10 pints of blue. Which of the following is the simplest form of the ratio of red paint to blue paint? (12-2)

- A $\frac{6}{11}$
B $\frac{10}{12}$
C $\frac{12}{10}$
D $\frac{6}{5}$

4. Claire averages a speed of 15 miles per hour on her bicycle. Which of the following can be used to find the distance she will travel in 2.5 hours? (12-5)

- A $d = \frac{15 \text{ miles}}{1 \text{ hour}} \div 2.5 \text{ hours}$
B $d \times \frac{15 \text{ miles}}{1 \text{ hour}} = 2.5 \text{ hours}$
C $d = \frac{15 \text{ miles}}{1 \text{ hour}} \times 2.5 \text{ hours}$
D $\frac{15 \text{ miles}}{1 \text{ hour}} = d \times 2.5 \text{ hours}$

5. The table shows the results of typing tests administered to 4 job applicants. Which applicant typed the most words per minute? (12-4)

Applicant	Words Typed	Time (in minutes)
Smith	84	2
Johnson	102	3
Ramirez	144	4
Yates	153	3

- A Smith
B Johnson
C Ramirez
D Yates
6. Doug caught 10 fish over a period of 4 hours. Which of the following is a unit rate per hour for this situation? (12-3)
- A 5 fish per 2 hours
B 2.5 fish per hour
C 4 hours per 10 fish
D 2.5 hours per fish

7. Some elephants drink 350 gallons of water in a week. What step can be used to find the unit rate for water per day? (12-3)

- A Divide 7 by 350.
B Multiply 7 by 50.
C Divide 350 by 7.
D Multiply 350 by 7.

8. April can buy a package of 10 folders for \$1.20 or a package of 8 folders for \$1.12. Which is the better buy? (12-4)

- A The 10-pack is cheaper at \$0.12 each than the 8-pack at \$0.14 each.
B The 8-pack is cheaper at \$0.12 each than the 10-pack at \$0.14 each.
C The 10-pack is cheaper at \$0.12 each than the 8-pack at \$0.15 each.
D The 8-pack is cheaper at \$0.12 each than the 10-pack at \$0.15 each.

9. The table shows the number of units that are rented and owned in a building. What is the ratio of the rented units to the total number of units in the building? (12-1)

Type of Occupancy	Number of Units
Rented	24
Owned	52

- A 6 to 19
B 6 to 13
C 19 to 6
D 13 to 6

10. Which number makes the two ratios form a proportion? (12-2)

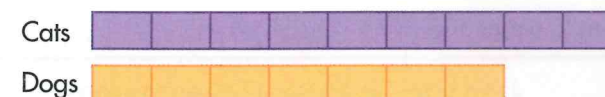
$$\frac{6}{9} = \frac{\square}{36}$$

- A 3
B 10
C 15
D 24

11. An accountant wrote 52 checks in 4 days. Which of the following is the rate for this situation? (12-3)

- A $\frac{52 \text{ days}}{\text{check}}$
B $\frac{52 \text{ checks}}{4 \text{ days}}$
C $\frac{26 \text{ checks}}{\text{day}}$
D $\frac{52 \text{ checks}}{\text{day}}$

12. An animal shelter has a ratio of cats to dogs that is 9:7. What fraction of these animals are dogs? (12-6)



- A $\frac{7}{16}$
B $\frac{9}{16}$
C $\frac{7}{9}$
D $\frac{16}{7}$