

SAT Ratios and Rates Worksheet

Name: _____ Date: _____

Circle one answer for each question. Use the blank space for calculations. A calculator is allowed.

- 1. The ratio of red beads to blue beads is 3:5. If there are 40 beads altogether, how many are red?**
 - A. 8
 - B. 15
 - C. 24
 - D. 25

- 2. A car travels 180 miles in 3 hours at a constant speed. What is its speed in miles per hour?**
 - A. 45
 - B. 60
 - C. 90
 - D. 540

- 3. A recipe uses 2 cups of flour for every 3 cups of oats. How much flour is needed for 12 cups of oats?**
 - A. 6 cups
 - B. 8 cups
 - C. 9 cups
 - D. 18 cups

4. A map uses 1 centimeter to represent 8 kilometers. How many kilometers does a 4.5-centimeter distance represent?
- A. 12.5
 - B. 32
 - C. 36
 - D. 45
5. A machine produces 150 parts in 6 minutes. At the same rate, how many parts does it produce in 10 minutes?
- A. 200
 - B. 225
 - C. 250
 - D. 300
6. How many inches are in 3.5 feet? Use 12 inches = 1 foot.
- A. 24
 - B. 36
 - C. 42
 - D. 45

7. A runner covers 400 meters in 80 seconds. What is the average speed in meters per second?
- A. 4
 - B. 5
 - C. 20
 - D. 320
8. If y is directly proportional to x and $y = 18$ when $x = 6$, what is y when $x = 10$?
- A. 22
 - B. 24
 - C. 30
 - D. 60
9. Paint covers 240 square feet per gallon. How many gallons are needed to cover 900 square feet at this rate?
- A. 3.25
 - B. 3.5
 - C. 3.75
 - D. 4.25

10. The ratio of teachers to students is 2:35. If there are 280 students, how many teachers are there?

- A. 8
- B. 16
- C. 20
- D. 35

11. A liquid has density 1.2 grams per milliliter. What is the mass of 250 milliliters?

- A. 208 grams
- B. 250 grams
- C. 300 grams
- D. 450 grams

12. A vehicle uses 4 gallons to travel 112 miles. At the same efficiency, how far can it travel on 7 gallons?

- A. 168 miles
- B. 180 miles
- C. 196 miles
- D. 224 miles