

SAT Math – Problem-Solving and Data Analysis Sample Paper (Questions)

Directions: For multiple-choice questions, choose the best answer. For student-produced response questions, enter your answer.

Question 1

A recipe uses 3 cups of flour for every 2 cups of sugar. If 12 cups of flour are used, how many cups of sugar are needed?

- (A) 6
- (B) 8
- (C) 9
- (D) 18

Question 2

A shirt originally priced at \$40 is discounted by 25%. What is the sale price?

- (A) \$10
- (B) \$25
- (C) \$30
- (D) \$35

Question 3

The average of five test scores is 82. If four of the scores are 78, 85, 90, and 76, what is the fifth score?

- (A) 79
- (B) 81
- (C) 83
- (D) 85

Question 4

A car travels 180 miles in 3 hours. At this rate, how many miles will it travel in 5 hours?

- (A) 240
- (B) 300
- (C) 360
- (D) 540

Question 5

In a bag of 20 marbles, 8 are red. If one marble is drawn at random, what is the probability it is red?

- (A) $\frac{2}{5}$
- (B) $\frac{3}{5}$
- (C) $\frac{8}{12}$
- (D) $\frac{1}{4}$

Question 6

The median of the data set 4, 7, 9, 12, 15 is:

- (A) 7
- (B) 9
- (C) 12
- (D) 15

Question 7

A store sells 60 items in the morning and 40 items in the afternoon. What percent of the day's sales occurred in the morning?

- (A) 40%
- (B) 50%
- (C) 60%
- (D) 67%

Question 8

If a ratio of a to b is 5:3 and $a + b = 40$, what is the value of a? (Student-produced response)