

# Elementary School Division

## Mental Math, Section 1

40 minutes, 25 questions

### Instructions

- DO NOT open the test until told to do so.
- NO scratch paper!
- Express all of your answers in simplified form.
- Please read the instructions before you start.

Please write your name :

Please write your ID number :

**Instructions :** This is Section 1, Mental Math. You MAY NOT use scratch paper on this section or jot down any work. This is meant to be done in your head. Do all of the questions to the best of your ability. All questions in this section are multiple choice.

Bubble in the multiple choice answers onto the green Scantron.

IF we cannot read your answers, it will be marked wrong.

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### Multiple Choice

- $12 \times 4 + 36 \div 9$   
(A) 52 (B) 42 (C) 62 (D) 32 (E) 72
- $2443 - 123$   
(A) 2220 (B) 2280 (C) 2360 (D) 2320  
(E) 2420
- $(12 - 6) \times 3 + 21$   
(A) 39 (B) 42 (C) 36 (D) 45 (E) 33
- $9 + 3 \times 2 - 4 \div 2$   
(A) 15 (B) 13 (C) 17 (D) 10 (E) 20
- $36 \div 4 + 5 \times 2$   
(A) 18 (B) 20 (C) 19 (D) 21 (E) 17
- What is 64 percent of 50?  
(A) 28 (B) 30 (C) 64 (D) 32 (E) 36
- $(? - 5) \times 3 = 9$   
(A) 11 (B) 8 (C) 6 (D) 9 (E) 20
- Alex works out 15 times a month. How many times does he workout in a year?  
(A) 200 (B) 160 (C) 180 (D) 170  
(E) 250
- Casey's car traveled 300 miles in 4 hours. At what speed was Casey's car traveling?  
(A) 60 mph (B) 75 mph (C) 80 mph  
(D) 70 mph (E) 90 mph
- What is the price of one tennis ball in a package of 4 balls, if a package costs \$10.44?  
(A) \$2.61 (B) \$2.76 (C) \$2.50  
(D) \$2.40 (E) \$2.80
- A bike accelerates uniformly at a rate of  $2 \text{ m/s}^2$ . How long does it take to get to a speed of  $10 \text{ m/s}$ ?  
(A) 4 (B) 10 (C) 5 (D) 6 (E) 8
- What is  $45 \times 7$ ?  
(A) 290 (B) 330 (C) 315 (D) 300  
(E) 340
- How far will Jake run if he runs at a rate of 50 feet per minute for an hour?  
(A) 3000 (B) 2500 (C) 2800 (D) 3200  
(E) 3500
- $20 - \frac{12}{4} + (5 \times 2)$   
(A) 23 (B) 30 (C) 27 (D) 25 (E) 20
- $3x + 7 = 22$   
(A) 7 (B) 5 (C) 6 (D) 10 (E) 3
- $\frac{1}{z} + 9 = 11$   
(A) 0.3 (B) 0.7 (C) 0.5 (D) 0.4  
(E) 0.6

17. Convert 2.5 feet to inches.  
(A) 25 (B) 35 (C) 32 (D) 28 (E) 30
18. If an object weighs 20 kilograms on Earth, what would be its weight on the moon where gravity is approximately  $\frac{1}{6}$ th that of Earth's?  
(A) 3.33 kg (B) 4.50 kg (C) 2.75 kg  
(D) 3.81 kg (E) 4.99 kg
19. Isaac needs to pay the cashier exactly \$49. In his wallet, he has 2 twenty dollar bills and 6 one dollar bills. How many quarters does Isaac need?  
(A) 8 (B) 10 (C) 12 (D) 14 (E) 16
20. What is the mean of the test scores 86%, 50%, and 26%?  
(A) 50 (B) 60 (C) 48 (D) 58 (E) 54
21. How many minutes are in a day?  
(A) 1200 (B) 1440 (C) 1500  
(D) 1300 (E) 1600
22. What is 80% of 50?  
(A) 30 (B) 45 (C) 38 (D) 40 (E) 35
23. What is  $9116 - 527$ ?  
(A) 8134 (B) 9298 (C) 8589 (D) 6721  
(E) 7463
24. Convert 645 grams to kilograms.  
(A) 0.654 (B) 0.351 (C) 0.123  
(D) 2.143 (E) 0.645
25. What is the sum of the first 10 prime numbers?  
(A) 129 (B) 133 (C) 120 (D) 137  
(E) 124