Montford/Cobb 6th Grade Mini Mu

Part I

Time: 50 minutes
Directions: Each of the 25 multiple-choice questions is followed by five possible answer choices. Choices A through D will provide answers, while Choice E is for none of these answers. Scoring will be as follows: 5 points for a correct answer, 0 for a wrong answer, and 1 for a blank answer (for a maximum possible score of 150). **Calculators are not permitted.**

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1. The tallest ride at Disney World is Summit Plummet at 120 feet. How many inches high is this ride?

   A. 10 B.720 C. 1440 D. 1560 E. NOTA

2. Students at Cobb Middle School conducted a survey of the students at their school. They found that 495 students preferred The Lion King over Aladdin and 350 students preferred Aladdin over the Lion King. What is the ratio of students that preferred Aladdin to the students that preferred The Lion King?

   A.2:3 B. 70:99 C. 3:2 D. 99:70 E. NOTA

3. Which property is displayed in the equation? $5 + (6 + 2) = (6 + 2) + 5$

   A. Associative B. Distributive C. Identity

   D. Commutative E. NOTA

4. Put the following numbers in order from greatest to least. $\frac{1}{9}$, 11%, 0.1, 1.11

   A. 1.11, $\frac{1}{9}$, 11 %, 0.1 B. 11%, 1.11, 0.1, $\frac{1}{9}$, C. 0.1, 11%, $\frac{1}{9}$, 1.11

   D. 1.11, 11%, 0.1, $\frac{1}{9}$ E. NOTA

5. Tiffany is making cookies. The recipe calls for $1\frac{3}{4}$ cups of sugar and $2\frac{1}{3}$ cups of flour. If she wants to make $1\frac{1}{2}$ batches of cookies, how much flour does she need?

   A. $2\frac{3}{4}$ c B. $2\frac{5}{8}$ c C. $3\frac{1}{3}$ c D. $3\frac{1}{2}$ c E. NOTA

6. If Mr. Blessing drives at an average of 70 mph and arrives at Disney World in approximately 3 hours and 40 minutes, how far is Disney from Mr. Blessing's original location in Tallahassee?

   A. 227.5 miles B. 238.0 miles C. 250.0 miles D. 256.7 miles E. NOTA

7. Evaluate the following expression. $\frac{3}{4} + (-\frac{4}{7}) - (-\frac{1}{4}) + 2\frac{1}{2}$

   A. $2\frac{13}{14}$ B.$3\frac{4}{7}$ C. $2\frac{1}{9}$ D. $2\frac{3}{7}$ E. NOTA

8. You spin a spinner with A, B, C, and D. Each lettered area is equal in size. What is the probability of getting an A or D?

   A. $\frac{1}{4}$ B. $\frac{1}{2}$ C. 2 D. 4 E. NOTA

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9. Ms. Taylor's classroom is 16 feet in width and 14 feet in length. What is the area of her classroom in square inches?

   A. 224 in^2 B. 720 in^2 C. 2688 in^2 D. 32256 in^2 E. NOTA

10. In order to ride Space Mountain at Disney World, you must be at least forty-four inches tall. Write this as an inequality.

    A. $h > 44\ in$ B. $h < 44\ in$ C. $h \geq 44\ in$ D. $h \leq 44\ in$ E. NOTA

11. Walt Disney World has approximately 130 rides and attractions combined. If 72 are rides, what is the ratio of rides to attractions?

    A. 36:65 B. 36:29 C. 65:29 D. 130:58 E. NOTA

12. Andrew wants to buy a new TV. The original price of the TV is $549. It is currently on sale for 25% off. When he gets to the register he uses a coupon for an addition 20% off. If 7% tax is added, what is the cost of the total TV?

    A. $263.52 B. $323.09 C. $340.38 D. $352.46 E. NOTA

13. Jasmine is going on a field trip to Magic Kingdom. Her mom gives her $25 to spend on a souvenir and her teacher gives her $10 for lunch. If Jasmine now has $83, how much of her own money did she bring?

    A. $48 B. $58 C. $73 D. $118 E. NOTA

14. Evaluate the following expression. $6(5(3+2)-7)+6(3)-1^2$

    A. 17 B. 125 C. 272 D. 989 E. NOTA

15. Tony rode six rides at Disney. The length of the rides varied. The rides lasted, 2 minutes and 10 seconds, 2 minutes and 3 seconds, 1 minute and 42 seconds, 1 minute and 58 seconds, 1 minute and 52 seconds, and 3 minutes and 35 seconds. What was the mean time of the rides Tony rode? Round to the nearest second.

    A. 1 minute and 59 seconds B. 2 minutes and 1 second C. 2 minutes and 4 seconds

    D. 2 minutes and 13 seconds E. NOTA

16. Evaluate the following expression if a = 3, b = 4, and c = -1. ac + ba - c

    A. 8 B. 9 C. 10 D. 14 E. NOTA

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17. Disney has approximately 130 rides and attractions. If Rusty participated in $\frac{3}{5}$ of the rides and attractions, in how many did he not participate?

A. 2 B. 48 C. 52 D. 78 E. NOTA

18. What is the sum of the next two terms in the sequence? $1\frac{3}{5}$, $2\frac{7}{10}$, $3\frac{4}{5}$, $4\frac{9}{10}$, 6….

A. $7\frac{1}{10}$ B. $8\frac{1}{5}$ C. $15\frac{2}{15}$ D. $15\frac{3}{5}$ E. NOTA

19. Twelve students from Montford went to Disney this summer. The students rode the following number of rides: 60, 21, 5, 43, 18, 25, 31, 58, 44, 33, 58, and 35. What is the median number of rides these twelve Montford students rode?

A. 28 rides B. 31 rides C. 34 rides D. 36 rides E. NOTA

20. Simplify the expression. $\sqrt{49} + \sqrt{144 + 25}$

A. 15 B. 20 C. 24 D. 26 E. NOTA

21. The formula for the surface area of a cylinder is $A = 2\pi rh + 2\pi r^2$. A cylindrical can of soup has a radius of 3 inches and a height of 6 inches. If the lid is removed, what is the surface area of the can? Use 3.14 for π.

A. 105.82 in^2 B. 113.04 in^2 C. 141.3 in^2

D. 169.56 in^2 E. NOTA

22. Twenty three of the 130 rides and attractions at Disney World are located in Disney's Hollywood Studios. What percent of rides and attractions at Disney World are located in Disney's Hollywood Studios? Round to the nearest whole percent.

A.15% B. 17% C. 18% D. 21% E. NOTA

23. Lynn went to Magic Kingdom at Disney World on Saturday. She spent 5 minutes parking, 3 hours and 15 minutes on rides, 35 minutes eating lunch, and 2 hours and 20 minutes watching shows. If she left the park at 5:00pm, what time did she arrive?

A. 10:35 am B. 10:40 am C. 10:45 am D. 11:15am E. NOTA

24. The two parallel sides of a trapezoid are known as the bases. If a trapezoid has bases measuring 14 inches and 30 inches and the height is $\frac{1}{2}$ the length of the longer base, what is the area of the trapezoid in square inches?

A. 154 in^2 B. 225 in^2 C. 330 in^2 D. 660 in^2 E. NOTA

25. Write an algebraic expression for eighteen less than twenty-four times a number.

A. 18n - 24 B. 18 - 24n C. 24 – 8n D. 24n - 18 E. NOTA

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26. Deborah goes to Disney with her friend Jasmine. The tickets cost $99.00 each. Jasmine buys a T-shirt for $15.99 and Deborah buys a hat for $12.95. At lunch the girls spent a total of $36. 76. How much will Jasmine spend if they split the total cost of the trip?

A. $82.35 B. $131.85 C. $164.20 D. $263.70 E. NOTA

27. Solve the following equation for x. $3x + 8 = 44$

A. $x = 4$ B. $x = 6$ C. $x = 12$ D. $x = 18$ E. NOTA

28. Lynn is planning a trip to Disney for her family of four. She estimates the cost to be $237.00 per person. If she saves $125.00 each month, how many months will it take her to save enough money for her family to go to Disney?

A. 2 months B. 7 months C. 8 months D. 11 months E. NOTA

29. Which of the following statements are false.

A. All squares are rectangles. B. All rectangles are rhombi. C. All rhombi are parallelograms.

D. All rectangles are parallelograms. E. NOTA

30. A triangle has sides with lengths 3 in, 4 in, and 5 in. If the longest side of a similar triangle is 30 in and the shortest side is 18 in, what is the length of the remaining side?

A. 20 in B. 22 in C. 24 in D. 26 in E. NOTA

31. Bailey's class is going on a field trip to Epcot. There are 50 students attending. Every student must purchase a ticket, lunch, and a t-shirt. Each ticket cost $76.00, a T-shirt costs $10.00 and lunch costs $15.00. The total for the bus is $1750, which is split between the students. What is the cost per student for the field trip?

A. $37.02 B. $111.50 C. $136.00 D. 172.35 E. NOTA

32. Simplify the following expression. $(\frac{1}{2})^2 + 5\frac{3}{4} - (-\frac{1}{2})$

A. $5\frac{1}{4}$ B. $5\frac{1}{2}$ C. $6\frac{1}{2}$ D. $7\frac{1}{4}$ E. NOTA

33. Paige and Wendy arrived at the gym. While at the gym they spent 10 minutes warming up, 27 minutes on the treadmill, 18 minutes with weighs and $\frac{3}{4}$ of an hour in a dance class. Before leaving the gym at 7:21am, they stretched for 6 minutes. What time did Paige and Wendy arrive at the gym?

A. 5:35 am B. 5:41 am C. 6:05 am D. 9:07 am E. NOTA

34. Place the correct symbol in the ○ to show the relationship between the numbers. $\frac{3}{7}$ ○ 0.42

A. < B. > C. ≤ D. = E. NOTA

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35. A number is divided by 8. The result is subtracted from 24. Which of the following expressions correctly represents these statements?

A. $24 - \frac{8}{n}$ B. $(n \div 8) - 24$ C. $\frac{n}{8} - 24$ D. $24 - \frac{n}{8}$ E. NOTA

36. A right triangle has sides with lengths of 3.2 feet, 6.1 feet, and 10.4 feet. What is the area of the triangle?

A. 9.76 ft^2 B. 16.64 ft^2 C. 19.5 ft^2 D. 31.72 ft^2 E. NOTA

37. Solve for x. $\frac{17}{18} = \frac{x}{108}$

A. 102 B. 105 C. 107 D. 108 E. NOTA

38. James rides the bumper cars five times. He gets bumped, 6 times on the first round, 18 times on the second round, 25 times on the third round, 17 times on the fourth round, and 27 on the fifth round times on each ride. Which measure of central tendency is the lowest?

A. Mean B. Median C. Mode D. Range E. NOTA

39. Hayden is one year old and 36 inches tall. Her dad, Tony, is 6 ft. If Hayden's shadow is 12 inches long, how many inches is Tony's shadow?

A. 2 in B. 16 in C. 24 in D. 28 in E. NOTA

40. Maddie, Bailey, and Avery are having a sleepover. Maddie's mom ordered two large pizza with 8 slices each. Maddie ate $\frac{3}{4}$ of a pizza, Bailey ate $\frac{1}{2}$ of a pizza, and Avery ate 2 slices of pizza. How many slices are left over?

A. 3 slices B. 4 slices C. 6 slices D. 10 slices E. NOTA

41. You spin a spinner with A, B, C, and D and roll a 6 sided number cube. What is the probability of getting a vowel and an even number?

A. $\frac{1}{2}$ B. $\frac{1}{4}$ C. $\frac{1}{6}$ D. $\frac{1}{8}$ E. NOTA

42. Montford Middle School is about 15 miles away from Cobb Middle School. Looking at a map, Brett notices that 2.5 miles is represented by 1 inch. How many inches on the map will Montford be from Cobb?

A. 5 in B. 6 in C. 7 in D. 9 in E. NOTA

43. Solve for x. $\frac{x+3}{4} = 1$

A. x = 1 B. x = 3 C. x = 4 D. x = 7 E. NOTA

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44. Quintavious is eating left over pizza. If he starts with $\frac{3}{4}$ of a pizza and eats $\frac{1}{2}$ of it, what fraction of the pizza is left?

A. $\frac{3}{8}$ B. $\frac{1}{4}$ C. $\frac{4}{6}$ D. $\frac{4}{8}$ E. NOTA

45. Which of the following numbers is not rational?

A. π B. $-3\ \frac{3}{78956}$ C. $\frac{1}{2}$ D. 3.821457956 E. NOTA

46. Solve for x. $\frac{21}{16} \div \frac{3}{8} = x$

A. $.\frac{5}{8}$ B. $\frac{7}{8}$ C. $2\frac{1}{2}$ D. $3\frac{1}{2}$ E. NOTA

47. Evaluate the following expression. 341^0

A. 0 B. 1 C. 143 D. 341 E. NOTA

48. Determine which property is displayed in the following equation.

$$3(x+1) = 4(x-2) \quad \rightarrow \quad 3x + 3 = 4x - 8$$

A. Associative B. Distributive C. Identity

D. Commutative E. NOTA

49. Pinocchio's nose grows every time he tells a lie. If his nose is 2 cm and grows 0.82 cm per lie, how long is it after 15 lies?

A. 12.3 cm B. 14.3 cm C. 16.6 cm D. 18.3 cm E. NOTA

50. Find the next number in the sequence. 1, 1, 2, 3, 5, 8, 13….

A. 13 B. 18 C. 21 D. 24 E. NOTA