

Cobb/Montford Mini Mu 2011: Round B

Multiple Choice: Do any scratch work on this test booklet. Identify the choice that best completes the statement or answers the question. Bubble your answer choice on the Scantron answer sheet. If none of the answers are correct, bubble choice "e". NOTA means "None Of The Above" are correct.

1. Around the race course in his Kart, Mario passes 32 wheels on nine cars and motorcycles. How many cars and motorcycles did he see?
a) eight cars and one bike b) seven cars and two bikes c) six cars and three bikes d) five cars and four bikes e) NOTA
2. Princess Peach is throwing a party. She has tables that can seat 8 people each and wants to know how many tables they will need to seat 250 people. How many tables? When she divides 250 by 8, what does the remainder mean?
a) 30; the remainder 2 is the number of people who will need another table. b) 31; the remainder 2 is the number of seats that will be empty at the last table. c) 32; the remainder 2 is the number of people who will sit at the last table. d) 32; the remainder 2 is the number of seats that will be empty at the last table. e) NOTA
3. Bowser sent out some Koupalings to attack Mario. There were 24 more red Koupalings than purple Koupalings. There were 36 fewer yellow Koupalings than red Koupalings. There were 25 purple Koupalings. How many yellow Koupalings were there?
a) 49 b) 12 c) 13 d) 11 e) NOTA
4. Princess Peach is watching the flowers in her garden grow. She measures one to see how fast it is growing. Her measurements were $2\frac{1}{3}$ inches, $4\frac{2}{3}$ inches, and 7 inches for the first three weeks. If the pattern continues, what will the height of the flower be after 5 weeks?
a) $9\frac{1}{3}$ in. b) $9\frac{2}{3}$ in. c) $11\frac{1}{3}$ in. d) $11\frac{2}{3}$ in. e) NOTA
5. Mario saved \$3.50 each week for 15 weeks. Luigi saved \$4.00 each week for 12 weeks. Who saved the most amount of money and how much more did they save?
a) Luigi saved \$4.50 more b) Mario saved \$7.50 more c) Luigi saved \$7.50 more d) Mario saved \$4.50 more e) NOTA
6. Toad is training for a marathon. He ran 3 miles on the first day he started training. He ran $\frac{1}{2}$ mile farther each day. After how many days did Toad run 13 miles?
a) 5 b) 12 c) 14 d) 21 e) NOTA
7. Walker left for vacation at 8:00 A.M. He drove at an average speed of 65 miles per hour. How many miles did Walker travel by 5:00 P.M.?

a) 195 b) 595 c) 650 d) 845 e) NOTA

8. Luigi is training by running stairs. It took him 5 minutes to run up the stairs and 2 minutes to run down the stairs. He ran up and down the stairs for 70 minutes. How many minutes of that time was Thomas running down the stairs?

a) 35 b) 14 c) 20 d) 50 e) NOTA

9. Bowser is filling the bottom of a box with tacks. The rectangular box is 8 inches by 4 inches and the tacks are $\frac{1}{2}$ -inch squares. How many tacks will he need?

a) 32 b) 48 c) 64 d) 128 e) NOTA

10. Princess Peach has a large piece of poster board that she is using for an art project. She cuts the piece in half. Then she places the 2 pieces on top of each other and cuts them in half, making four pieces of poster board. Using this method, how many cuts would it take to make 128 pieces of poster board?

a) 7 b) 8 c) 32 d) 64 e) NOTA

11. One lap of the race in Mario Kart has a 110-meter stretch of roadblocks and is made up of three parts. First the racers drive 13.72 meters from the starting line to the first roadblock. Over the next 82.26 meters, they encounter ten evenly spaced roadblocks. Finally, there is a 14.02 meter stretch from the last roadblock to the finish line. What is the distance from one roadblock to the next?

a) 8.226 meters b) 9.14 meters c) 10.28 meters d) 11 meters e) NOTA

12. Princess Peach used 32 beads to make a bracelet. Of the beads, $\frac{1}{2}$ are red and $\frac{3}{8}$ are yellow. The rest are blue. How many beads are blue?

a) 22 b) 16 c) 6 d) 3 e) NOTA

13. Mario and Luigi just finished practicing driving their Karts. They drove for $1\frac{1}{2}$ hours then took a 15 minute break. Then they drove for another hour. Now it is 1:00 p.m. What time did they start driving practice?

a) 10:45 a.m. b) 10:15 a.m. c) 11:15 a.m. d) 9:45 a.m. e) NOTA

14. Bowser loves nuts! He bought 2.50 pounds of peanuts for \$8.25. His friend buys 7.25 pounds of pecans for \$26.83. Which is less expensive per pound? By how much?

a) pecans; \$0.40 b) peanuts; \$0.80 c) peanuts; \$0.40 d) pecans; \$0.80 e) NOTA

15. Toad is awaiting the arrival of his friend, Luigi at 3:30. When Luigi arrives, Toad looks at the clock and commends his friend for being exactly on time to the exact second. What angle do the hands of the clock that he is looking at make?

a) acute b) right c) obtuse d) straight e) NOTA

16. Mario timed eight of his competitors during a 100-lap race around a Kart course. The times were as follows (in hours): 6.4, 7.3, 12.5, 16.3, 8.9, 10.2, 14.1, 9.6. Mario is going to divide the competitors into groups using the median score. What is the median for these times?
a) 9.6 b) 10.2 c) 9.9 d) 11.4 e) NOTA
17. Out of 22 mushrooms in the Mushroom Kingdom, 20 are edible. Based on these results, out of 572 mushrooms, how many could Luigi eat?
a) 26 b) 520 c) 440 d) 52 e) NOTA
18. Princess Peach's house has a number. If her house number is a multiple of three, then it is a number from 50 through 59. If her house number is not a multiple of 4, then it is a number from 60 through 69. If her house number is not a multiple of 6, then it is a number from 70 through 79. What is her house number?
a) 54 b) 62 c) 72 d) 76 e) NOTA
19. Yoshi came across the following puzzle: "We--Andrew, Byron, and Christopher--each have some children. Andrew has at least one girl and twice as many boys. Byron has at least one girl and three times as many boys as girls. Christopher has at least one girl and three more boys than girls. When I tell you the number of children we have altogether--a number less than 25--you will know how many children I have, but not how many children each of the others has. Altogether, we have..." Who is the speaker? How many children does he have?
a) Andrew; 3 children b) Byron; 8 children c) Christopher; 9 children d) Andrew; 9 children
e) NOTA
20. To move on to the next level, Mario must give the eighth term in the sequence: $\frac{1}{4}, \frac{1}{9}, \frac{1}{16}, \frac{1}{25}, \dots$. What should he answer?
a) $\frac{1}{8}$ b) $\frac{1}{36}$ c) $\frac{1}{49}$ d) $\frac{1}{64}$ e) NOTA
21. Bowser is throwing daggers at Luigi but says he will stop if Luigi can tell him the sum of the first ten prime numbers. What should Luigi answer?
a) 120 b) 129 c) 127 d) 158 e) NOTA
22. On Mario's race track, a road sign says " $\frac{160}{\frac{2}{\frac{4}{10}}}$ mph." What is the speed limit there?
a) 160 mph b) 200 mph c) 32 mph d) 64 mph e) NOTA
23. Princess Peach has the following items in her wardrobe: 4 pairs of shoes, 5 pairs of pants, 6 shirts. How many different outfits can she make?
a) 15 b) 26 c) 34 d) 120 e) NOTA
24. Toad is baking cookies. The recipe calls for $3\frac{1}{4}$ cups of flour and $1\frac{1}{2}$ cups of sugar. However, he is going to make $2\frac{1}{2}$ batches so that he will have enough cookies to share with all of his friends. How many cups of flour does he need? sugar?

- a) $6\frac{1}{8}$ c. flour; $2\frac{1}{4}$ c. sugar b) $6\frac{1}{8}$ c. sugar; $2\frac{1}{4}$ c. flour c) $8\frac{1}{8}$ c. sugar; $2\frac{1}{4}$ c. flour
d) $8\frac{1}{8}$ c. flour; $3\frac{3}{4}$ c. sugar e) NOTA

25. Mario raced his Kart around a course 7 different times. He tracked his average speeds over the 7 laps and got the following: 121 mph, 152 mph, 144 mph, 134 mph, 132 mph, 140 mph, 120 mph. He wants to get an overall average of 140 mph. How much faster must he average on his 8th and final lap than his fastest average time thus far.
a) 25 mph b) 33 mph c) 140 mph d) 177 mph e) NOTA
26. Bowser is making a triangular obstacle to block Mario's Kart. Thus far, Bowser has made two of the angles, which are 35° and 45° .
a) 35° b) 45° c) 90° d) 100° e) NOTA
27. Bored one afternoon, Mario decided to challenge Luigi to a rousing round of "Guess My Fraction." Mario began, "I'm thinking of a fraction...if it were a decimal, it would be 0.181818..." Luigi, being a fraction geek instantly knew the answer was _____.
a) $\frac{2}{7}$ b) $\frac{2}{9}$ c) $\frac{2}{11}$ d) $\frac{2}{13}$ e) NOTA
28. Still bored later in the afternoon, Luigi challenged Mario back with a Power Puzzler. He said, "what is the sum of the following powers: $2^0, 2^1, 2^2, \dots, 2^9, 2^{10}$?"
a) 2047 b) 2046 c) 110 d) 1024 e) NOTA
29. Princess Peach has a box in her garden that is in the shape of a pentagon. She connects string to each corner of the box and connects each corner to every other corner. How many triangles did she make?
a) 10 b) 20 c) 25 d) 35 e) NOTA
30. Mario has fallen down one of Bowser's trap holes. He is trying to jump out but the surface is slippery. He can jump $\frac{1}{2}$ foot high, but for every $\frac{1}{2}$ foot he jumps, he slides back down $\frac{1}{8}$ foot. If the hole is 6 feet deep, how many jumps does it take Mario to get out?
a) 12 b) 13 c) 15 d) 16 e) NOTA

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Answer Section

MULTIPLE CHOICE

1. B
2. C
3. C
4. D
5. D
6. D
7. E
8. C
9. D
10. A
11. B
12. E
13. B
14. A
15. A
16. C
17. B
18. D
19. E
20. C
21. B
22. B
23. D
24. D
25. A
26. D
27. C
28. A
29. D
30. C