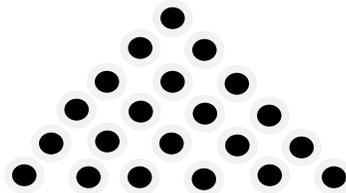




Elementary Countdown Round 11022

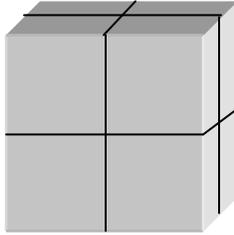
- 1) What is $(2 + 3 + 4 + 5 - 6 - 8)$? [0]
- 2) Today is Saturday. What day will it be 100 days from now? [Monday]
- 3) 36 divided by 3 equals 3 times what number? [4]
- 4) Sundeep and Murthy both start with the same number. Sundeep adds 6 to the number. Murthy multiplies the number by 2. They both get the same result. What number did they both start with? [6]
- 5) It is 2:00 PM right now. What time will it be in 100 hours? (Make sure to say if it is AM or PM). [6:00 PM]
- 6) Deveena has a pile of coins consisting of only quarters and dimes. Together, the change is worth 85 cents. What is the most number of dimes Deveena could have? [6]
- 7) What is the smallest odd prime number? [3]
- 8) On the math contest, a student receives 5 points for each correct answer and loses one point for each incorrect answer. Francesca gets 19 problems correct and 2 problems incorrect. What is her score? [93]
- 9) Karel has 8 nickels, 16 dimes, and four quarters. How much money (in dollars and cents) does he have all together? [\$3.00]
- 10) What is the smallest positive number that can be evenly divided by 2, by 3, and by 5? [30]

- 11) How many dots are in the figure below? [21]



- 12) May 5 is a "Palindrome Day", because the number of the month and the number of the day are the same (5/5). How many Palindrome Days are there in the year 2010? [12]

- 13) Shen buys a robot for \$5, sells it for \$7, buys it back for \$10, then sells it again for \$16. How much profit did she make on all the deals together? [\$8]
- 14) On the last four math contests, Yi scored 100, 84, 92 and 120. What was Yi's average score on the four math contests? [99]
- 15) A big cube is sliced into smaller cubes by making cuts halfway through each edge, as shown below. Once all the cuts are finished, how many smaller cubes result? [8]



- 16) What is the value of 111 ones plus 1 hundred plus 11 tens? [321]
- 17) Greta puts the numbers starting from 1 into four columns (A, B, C, and D) using the pattern shown below. Into which column (A, B, C, or D) will Greta write the number 42? [B]

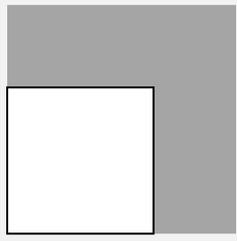
A	B	C	D
1	2	3	4
5	6	7	8
9	10	11	12

- 18) A digital camera and a memory card cost \$100 together. If the digital camera costs \$80 more than the memory card, how much does the memory card cost? [\$10]
- 19) If a train travels 1.5 miles in one minute, what is its speed in miles per hour? [90]
- 20) Eloise starts with a number. She multiplies the number by 4, adds 8 to the result of that operation, then divides that result by 3. If the final result was 28, what was the original number Eloise started with? [19]
- 21) Perkins has floor tiles measuring 4 inches by 6 inches. How many of these tiles would take to cover a floor measuring 2 feet by 3 feet, without overlapping any tiles? [36]
- 22) When a number is multiplied by itself, the result is called a "square number". For example: 1 (= 1x1) and 4 (=2x2) are square numbers. What is the largest square number that is less than 100? [81]
- 23) VJ has 40 M&Ms, all are either red or yellow. He gives half his yellow M&Ms to Mark. After this, VJ has 27 M&Ms left in total. How many red M&Ms does VJ have? [14]

- 24) What is the largest multiple of 3 that is less than 100? [99]
- 25) What is $18 + 19 + 20 + 21 + 22$? [100]
- 26) The product of two whole numbers is 19. What is their sum? [20]
- 27) 12 dozen shoes are divided into pairs. How many pairs are there? [72]
- 28) What is the time 7 hours and 7 minutes after 8:08 AM? (Make sure to put AM or PM after your answer) [3:15 PM]
- 29) If 2 groops are equal to 3 floops, and 4 floops are equal to 5 shoops, then how many groops are equal to 15 shoops? [8]
- 30) What is the value of $(400 - 78 - 22 - 84 - 16 - 81 - 19 - 27)$? [73]
- 31) Ana divided a certain number N by 6 and got 4 as her answer. If Carmen multiplied the same number N by 2, what would be her answer? [48]
- 32) Marcia is three years older than Jan. Greg is four years older than Jan. Peter is two years younger than Greg. How many years older than Peter is Marcia? [1]
- 33) Min has a collection of figures, all of them are either squares and triangles. She counts all the sides of the figures and gets a total of 19. What is the largest number of triangles Min could have? [5]
- 34) A rectangle and a square have the same area. The rectangle has side lengths of 2 and 8. What is the side length of the square? [4]
- 35) In one day, Sparky can eat 6 oranges and Anna can eat 2 oranges. How many days would it take the both of them to eat 24 oranges? [3]
- 36) What is the value of $(45 + 37 + 24 - 30 - 20 - 40)$? [16]
- 37) Rowena has a bug collection. Each day she adds 3 new bugs to her collection. If she has 28 bugs after 4 days, how many bugs will she have after 10 days? [46]
- 38) What is the value of $(25 \times 6 \times 14)$? [2100]
- 39) A swimming pool measuring 10 meters by 20 meters is enclosed by a deck that measures 1 meter in width. What is the area of the deck (in square meters)? [64]
- 40) Kaia stands in a line of people. She is the 13th person, counting from the front of the line. She is the 8th person, counting from the rear of the line. How many people are in the line? [20]

41) Paper clips cost 48 cents for one dozen. How many paper clips can be bought for \$1? [25]

42) If the inner square has side length 4, and the outer square has side length 6, what is the area of the shaded region? [20]



43) In the months of March and April, it only rained on every odd-numbered day. In those two months, how many days did it rain? [31]

44) 8 hours and 37 minutes is how many minutes? [517]

45) There are 4 people at a party. If each person shakes hands with each other person one time, then how many handshakes will happen? [6]

46) Nikolai writes down the numbers from 1 to 100. In how many different numbers does the digit 3 appear? [19]

47) What is the largest two-digit odd number with an even tens' digit? [89]

48) If Taji can run 10 kilometers in one hour, how long (in minutes) would it take her to run 500 meters? [3]

49) When Nnendi sells a short story, she gets paid 4 cents per word. If she sells a short story that is 3500 words, how much money (in dollars) does she get paid? [\$140.00]

50) Jenny can mail up to 3 books in one Special Book Mailing Box. If she has 26 books to mail, how many Special Book Mailing Boxes does Jenny need? [9]

51) If (the number of sides in a triangle) is multiplied by (the number of sides in a pentagon), what is the result? [15]

52) 2 lines can intersect in at most 1 point. What is the maximum number of points in which 4 lines can intersect? [6]

53) What is the average of 9, 18 and 36? [21]

54) Eleni has 1 quarter, 2 dimes, 3 nickels and 4 pennies. How much money (in cents) does Eleni have? [64 cents]

- 55) A line and a circle are drawn on a piece of paper so that the line passes through the center of the circle. How many times does the line cross the circle? [2]
- 56) A teacher brought 32 cookies to school for her class. Every student got a cookie, and 10 students took two cookies. If $\frac{1}{4}$ of the cookies were left over, how many students are in the class? [14]
- 57) Annika is watching the new *Math Girl* movie in the theatre. The movie is 1 hour and 26 minutes long, and there were 9 minutes of previews before the movie. If the previews started at 2:30, what time will the movie be done? [4:05]
- 58) How many positive integers less than 30 are divisible by 3 or 5 but not both? [12]
- 59) Azza likes to kick footballs. If he kicked one football 42 yards, two footballs 44 yards each, and one football 54 yards, what was the average distance (in yards) of all four of his kicks? [46 yards]
- 60) Maral has 100 pennies and Charlotte has no pennies. Maral gives half her pennies to Charlotte. Charlotte then gives half her pennies back to Maral. How many pennies does Maral have when they're done? [75]
- 61) What is the value of $(45 + 45 + 45 + 45) + (55 + 55 + 55 + 55)$? [400]
- 62) What is the sum of the first four positive prime numbers? [17]
- 63) Kylie has five coins. Only one of them is a penny. What is the least amount of money (in cents) that Kylie can have? [21 cents]
- 64) What is the value of $(27 \times 27) - (13 \times 13)$? [560]

MATH BOWL CHAMPIONSHIP ROUND QUESTIONS

- 65) In the Math Bowl Championship Round, two teams compete to answer 11 questions. Only one team can get credit for answering a question correctly. What is the minimum number of questions a team must answer correctly in order to ensure they win the Math Bowl Championship Round? [6]
- 66) What is $(18 \times 25 \times 22) \div (55 \times 15)$? [12]
- 67) June has 10 shapes which are either triangles or squares. When June counts up all the sides, the total is 34 sides. How many triangles does June have? [6]
- 68) Angel uses the digits 1 through 9 to make three three-digit numbers by using each digit exactly once. He then adds the three numbers together. What is the largest possible value of the sum he gets as his result? [2556]

- 69) What is the ones' digit of the product $(79 \times 79 \times 79)$? [9]
- 70) What is (the number of faces of a cube) times (the number of vertices of a cube)? [48]
- 71) We define the operation Ω as the average of two numbers, in other words $(A \Omega B) = (A+B)/2$. What is $2 \Omega (6 \Omega 4)$? [$3 \frac{1}{2}$ or 3.5]
- 72) Toya has 27 cent stamps and 9 cent stamps. She needs to put a total of 72 cents on a package. What is the smallest number of stamps she can use? [4]
- 73) Dr. Marvin Candle was born in an interesting year. The tens digit was three times the thousands digit, the hundreds digit was three times the tens digit, and the ones digit was the sum of the tens digit and the thousands digit. What year was Dr. Candle born? [1934]
- 74) When a certain two-digit number is divided by 7, the remainder is 5, and when it is divided by 9, the remainder is also 5. What is the smallest possible value of the number? [68]
- 75) In a Fibonacci sequence, each number after the second number is the sum of the previous two numbers. For example, the sequence 1, 1, 2, 3, 5 is a Fibonacci sequence. Carlos makes a Fibonacci sequence starting with two numbers A and B. The sequence starts A, B, 11, 20, 31. What is the value of A? [2]
- 76) How many two digit numbers are there in which the tens digit is greater than the ones digit? [45]
- 77) A rectangle has sides whose lengths are integers (whole numbers). The perimeter of the rectangle is 18. What is the largest possible value for the area of the rectangle? [20]
- 78) Morrison is counting numbers by starting at 100 and subtracting 7 each time. So, he starts out with 100, 93, 86, and continues. What is the last positive number Morrison counts? [2]
- 79) What is the value of $(26 + 27 + 28 + 29 + 30 + 31 + 32 + 33 + 34)$? [270]
- 80) We will call 1234 a "mountain" number because each digit, reading left to right, is larger than the previous digit. What is the largest "mountain" number that is less than 10,000? [6789]