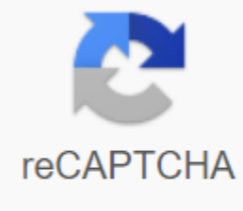




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2015 amc 10b

Copyright © 2020 Art for Problem solving Copyright © 2020 Problem Solving Art 2015 AMC 10B (key to reply)Print version: Wiki | AoPS Resources • PDF Instructions This is a 25-question, multiple-answer test. Each question is followed by answers marked with A, B, C, D and E. Only one of these is true. You will get 6 points for each correct answer, 2.5 points for each problem left unanswered if the year is before 2006, 1.5 points for each problem left unanswered if the year is after 2006, and 0 points for each incorrect answer. No aids other than scratch, millimeter paper, linear, compass, slag and erasers (and calculators accepted for use of sat are allowed if before 2006 there are no problems on the test will require the use of a calculator). The numbers do not have to be drawn in scale. You will have 75 minutes of working hours to complete the test. $1 \cdot 2 \cdot 3 \cdot 4 \cdot 5 \cdot 6 \cdot 7 \cdot 8 \cdot 10 \cdot 11 \cdot 12 \cdot 13 \cdot 14 \cdot 15 \cdot 16 \cdot 17 \cdot 18 \cdot 19 \cdot 21 \cdot 22 \cdot 23 \cdot 24 \cdot 25$ What is the value of ? Solution Problem 2 Marie does three equally time-consuming tasks in a row without interrupting. She started the first task at 1:00 p.m. and completed the second task at 2:40 p.m. When will the third task be completed? Solution Issue 3 Isaac has saved one integer twice and another integer three times. The sum of the five numbers is , and one of the figures is . What's the other trick? Solution 4 Four siblings ordered a very large pizza. Alex ate, Beth and Cyril ate pizza. Dan took the leftovers. What is the sequence of the siblings in descending order of the portion of pizza they consume? Solve Problem 5 David, Hikmet, Jack, Martha, Rand and Todd have been in competition with other people. Rand finished ahead of Hikmet. Martha finished behind Jack. David finished places behind Hikmet. Jack finished behind Todd. Todd finished behind Rand. Martha's done on the spot. Who ended up on the scene? Solution Problem 6 Marley practices exactly one sport every day of the week. She works three days a week, but never on two consecutive days. On Monday, she played basketball and two days later golf. She swims and plays tennis, but never plays tennis the day after running or swimming. What day of the week is Marley swimming? Solution Issue 7 Consider the operation minus the reciprocal one defined by . What is it? Solution Problem 8 The letter F shown below is rotated clockwise around the origin, then reflected in the -axis, then rotated half a rotation around the origin. What is the final image? Solution Problem 9 The shady area below is called the shark fin falcata, a figure studied by Leonardo da Vinci. It is limited by the part of the radius circle and the centre located in the first quadrant, the part of the circle with a radius and centre located in the first and the segment on the to . What is the area of the shark's fine falcon? Solution Problem 10 What is the figure of the character and units of the work of all odd negative integers, strictly greater than ? Solution Problem 11 Among positive integers less than , each of whose digits is a basic number, one is selected randomly. What is the probability that the selected number is the first number? Solution Issue 12 For how many integers is the point inside or within a radius centered in ? Solution Problem 13 The line forms a triangle with the coordinate axes. What is the sum of the lengths of the heights of this triangle? Solution Problem 14 Let's , and be three different single digits. What is the maximum value of the sum of the roots of the equation? 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Solution Problem 23 Let it be a positive integer greater than 4 the decimal representation of the ending in zeros and the decimal image of the ending in zeros. Let's denote the sum of the four least possible values of . What is the sum of the figures of ? Solution 24 Aaron ant walks along the coordinate plane according to the following rules. It starts from the beginning of the east and walks a unit arriving in . If Aaron can turn left and walk down a block to an undoubted point - he does that. Otherwise, he will go one block to reach . Thus, the sequence of points continues , and so on in counterclockwise spiral pattern. What is it? Solution Issue 25 Rectangular box measures where and integers are and . The volume and area of the box are digitally equal. How many triple numbers are possible? Decision See also the Chairman of the Committee: Eric Wu Email: info@aylus.org The Mathematical Committee coordinates all activities related to the current development of mathematics, mathematical and secondary schools. AMC Instruction Video Project The Mathematical Commission is developing a series of AMC problem-solving videos to help students prepare for the AMC math contest. Mathlets Eric Wu and Hill Inn have released a series of video solving problems with AMC. The video can be found here! Copyright © 2020 Art for Problem solving Copyright © 2020 Problem Solving Art 2015 AMC 10B (key to reply)Print version: Wiki | AoPS Resources • PDF Instructions This is a 25-question, multiple-answer test. Each question is followed by answers marked with A, B, C, D and E. Only one of these is true. 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