

1986 Q22

22. Alan, Beth, Carlos, and Diana were discussing their possible grades in mathematics class this grading period. Alan said, "If I get an A, then Beth will get an A." Beth said, "If I get an A, then Carlos will get an A." Carlos said, "If I get an A, then Diana will get an A." All of these statements were true, but only two of the students received an A. Which two received A's?
- A) Alan,Beth B) Beth,Carlos C) Carlos,Diana
D) Alan,Diana E) Beth,Diana

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2005 Q24

24. A certain calculator has only two keys [+1] and [$\times 2$]. When you press one of the keys, the calculator automatically displays the result. For instance, if the calculator originally displayed "9" and you pressed [+1], it would display "10." If you then pressed [$\times 2$], it would display "20." Starting with the display "1," what is the fewest number of keystrokes you would need to reach "200"?
- (A) 8 (B) 9 (C) 10 (D) 11 (E) 12

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23. Three members of the Euclid Middle School girls' softball team had the following conversation.

Ashley: I just realized that our uniform numbers are all 2-digit primes.

Bethany: And the sum of your two uniform numbers is the date of my birthday earlier this month.

Caitlin: That's funny. The sum of your two uniform numbers is the date of my birthday later this month.

Ashley: And the sum of your two uniform numbers is today's date.

What number does Caitlin wear?

- (A) 11 (B) 13 (C) 17 (D) 19 (E) 23