1. The police receive a 911 call saying that a party has gone horribly wrong and there has been a murder at Tudor Manor on Dead End Road! The man on the phone says that the house number is the solution to the equation: 

What is the house number?

**A) 12 B) 18 C) 55 D) 300 E) NOTA**

1. When the police arrive at the mansion, they round up all **6 people** in the house and line them up against a wall: Mrs. White, Mr. Green, Mrs. Peacock, Professor Plum, Miss Scarlet, and Colonel Mustard. How many different ways can they be put in a line?

**A) 6 B) 20 C) 720 D) 46656 E) NOTA**

1. While they are waiting to be questioned by the police, Professor Plum and Mr. Green decide to do some math to pass the time. Professor Plum asks Mr. Green to simplify the following expression:   Help Mr. Green solve Professor Plum’s problem.
2. **B) C)**

**D) Cannot Be Simplified E) NOTA**

1. Miss Scarlet tells the police that the number of people who saw the body before her is equal to the minimum value of  How many people saw the body before Miss Scarlet?

**A) 0 B) 1 C) 2 D) 3 E) NOTA**

1. The police find some fingerprints on the body! Unfortunately, they cannot find matches for all of the fingerprints. The number of matches they find is equal to . Given that  and , how many matches did they find?

**A) 1 B) 4 C) 5 D) 9 E) NOTA**

31. =

**A) No Solution B) *i* C) -1 D) 1 E) NOTA**

32. Put 2 • 32 • 16 • 8 in the form 2y. *y*=?

**A) 6 B) 12 C) 28 D) 60 E) NOTA**

33. When the police are searching for evidence, they look in the cookie jar and discover someone has been eating parts of the cookies in the cookie jar (most likely Detective Kumar). The number of cookies left in the cookie jar is equal to the slope of the line perpendicular to the line with the equation 9x + 5y = -20 . How many cookies are left in the jar?

**A)  B)  C)  D) 4 E) NOTA**

34. Solve for *z*: 



**A)**   **B) z = x – y C)**  **D) z = x + y E) NOTA**

35. The house is on a grid system (This is a math test: Just go with it.) The party going on at the time of the murder was at (7,4) and the body was discovered at (-2,1). Halfway between the party and the murder scene, the police find what they believe is the murder weapon. (A candlestick!) Where did they find the candlestick?

**A)  B)  C) (2,3) D) (3,3) E) NOTA**

36. The police decide that there are only *y* number of rooms (**There are 9 rooms in total**) where the murder could have taken place. *y* is the quadrant where (-3, -5) is located. How many rooms have the police limited their search to?

**A) 1 B) 2 C) 3 D) 4 E) NOTA**

37. Which of the following is an irrational number?

**A)  B) *π* C)**  **D)**  **E) NOTA**

38. (3x-1)(2x+2) =

**A) 5x + 1  B) 6x2 - 2 C) 6x2 – 4x - 2 D) 6x2 – 12x - 2 E) NOTA**

39.  Solve for x.

**A)**  **B) 1**  **C)**  **D) 3 E) NOTA**

40. A police officer is scouting the area around the mansion. She walks 8 yards north and then 6 yards to west. How far is she from where she originally started?

**A) 10 feet B) 14 feet C) 30 feet D) 42 feet E) NOTA**

41. What is the GCF of  and?

**A) 5wxyz B) 25x2y4z3 C) 25wx2y7z3**

**D) 625x5y11z8 E) NOTA**

42. What is one minus the reciprocal of the rate of change of ?

**A)**  **B)**  **C)**  **D)**  **E) NOTA**

43.  

**A)**  **B)**  **C)**  **D)** 

**E) NOTA**

44. Mrs. Peacock discovers that Colonel Mustard is the murderer!!! When she makes her discovery, she is standing still, but begins to run and within the 15 seconds it takes her to get across the house to warn everyone else, she has sped up to a speed of 45 m/s. What was the average rate of change of Mrs. Peacock’s speed as she ran across the house?

**A) 3 m/s2 B) 15 m/s2 C) 30 m/s2 D) 45 m/s2 E) NOTA**

45. When the police find Colonel Mustard, he tells them that he will go with them willingly if they can tell him what the degree of ? What answer should the police give him if they want his cooperation?

**A) 2 B) 6 C) 9 D) 12 E) NOTA**

46.  If , what is  in simplest form?

**A) -17 B) 8 C)** ** D)**  **E) NOTA**

47. Now that the police have caught the killer, they need to clean up the crime scene. They send Professor Plum to Publix to get some Clorox wipes. Clorox wipes usually cost $2.00 per pack at Publix, but when Professor Plum gets there they are having a 40% off sale on wipes! How much does Professor Plum have to pay (excluding tax)?

**A) $0.80 B) $0.50 C) $1.20 D) $1.60 E) NOTA**

48. Find the zero(s) of.

**A) 1 B)**  **C) 1, 3 D) 2, 3 E) NOTA**

49. What is .0000000091 in scientific notation?

**A) 91 x 10-10 B) 9.1 x 10-9 C) 0.91 x 10-8 D) 9.1 x 109 E) NOTA**

50. Given that there are **6 possibilities for the murder weapon**, how many possible solutions are there in the game Clue? (A solution consists of one weapon, one room, and one suspect.)

**A) 21 B) 36 C) 216 D) 324 E) NOTA**

[](http://www.google.com/url?sa=i&rct=j&q=&esrc=s&frm=1&source=images&cd=&cad=rja&uact=8&ved=0CAcQjRw&url=http%3A%2F%2Fwww.studyzone.org%2Ftestprep%2Fela4%2Fm%2Fcontextcluesl.cfm&ei=-etbVPj6H5P_yQT4toGICw&psig=AFQjCNEK_DaJSTeP9HhkmI0OLGjDrJJY1g&ust=1415395676550631)