1) **C** The answer is given in question 30.

2) **E** All answer choices are equivalent.

3) **A** 

4) **C** The points form a 3-4-5 right triangle. Alternatively, you could use the distance formula:  


5) **D** Dividing by zero is not defined.

6) **B** 

7) **B** 

8) **C** 

9) **B** 

10) **E** 

11) **B** There are 365 days between April Fools’ day of 2014 and 2015, so divide 365 by 7 to get 52 with a remainder of 1, which means that the week will cycle through 52 times with one day left over, so the answer is **Wednesday**.

12) **D** 

13) **A** I has degree 9, II has degree 8, and III has degree 5, so the answer is **I**.

14) **B** Michael can complete  of the test in an hour, while Sampath can complete  of the test in an hour, which means that together they can complete  of the test in an hour; so, it will take them hours to complete the test.

15) **C** The amount eaten by Nathan and Nick is , leaving left over for Daniel.

16) **D** Since he didn’t skip any, we don’t have to worry about points for skipped answers. We know that he got 150/6 = 25 questions correct. On the Mini Mu scale, 25 correct and 5 wrong is equal to 5(25) +0(5) = 125.

17) **E** 

18) **A **   
19) **C** This *n*th term of this sequence, known as the Fibonacci sequence, is given by the sum of the previous two terms. So the first 10 terms are 1, 1, 2, 3, 5, 8, 13, 21, 34, 55.

20) **C** *x-*intercept:    
*y-*intercept:    
16 + 14 = **30**.

21) **C** Every answer except for C includes the choice “Nobody,” so logically none of the other answers could possibly be correct.

22) **C** 3\*7\*8 = 168

23) **A**

24) **B** There are 5! = 120 ways.

25) **B** This means that cows and dogs have five legs, and chickens have three legs. Since there are 10 cows and 20 dogs, then they account for 30•5 = 150 legs. So, that means the remaining 75 legs belonged to the three-legged chickens, so there are 75/3 = 25 chickens.

26) **B** Move all of the terms to the left side.  
   
which tells us that . So, the sum of the negative integer solutions is   
-1 + -2 + … + -6 = -21.

27) **B** 

28) **C** Dorren: 369/3 = 123 grams per dollar  
Shiming: 484/4 = 121 grams per dollar  
Colleen: 625/5 = 125 grams per dollar

29) **A**If you got this wrong, you should feel bad.

30) **B** The line *x* = 7 is a vertical line, so the line perpendicular to it is a horizontal line, which means the slope is **0**.