

## Math Review Test 1 Detailed Report

| SI | Question  | % got it right | Your Answer      | Correct Answer   |
|----|---|----------------|------------------|------------------|
| 1  | If x is a positive odd number, then each of   | 70.59%         | a. (x+4) (x+6)   | a. (x+4) (x+6)   |
| 2  | the following is even except: Which one of the following is the minimum value of the sum of two integers whose product is 81?   | 5.88%          | a. 18            | d82              |
| 3  | If 4 is subtracted from one-sixth of a number, the result is 20. The number is  | 94.12%         | b. 144           | b. 144           |
| 4  | If the product of 2, 9 and 12 is equal to one half the sum of 132 and x, then x =?  | 64.71%         |                  | b. 300           |
| 5  | If $(x+2)^2 = 9$ and $(y + 7)^2 = 25$ then the minimum value of xy is   | 17.65%         | e. None of these | b. –12           |
| 6  | If ¼ of a number is 16 then ½ of the number is-   | 94.12%         | e. 32            | e. 32            |
| 7  | If $x^2 - y^2 = 16$ . Then $4(x + y)(x-y) = ?$  | 82.35%         | a. 64            | a. 64            |
| 8  | What is the value of $(x-2)$ . When $3x - 8 = 1$ ?  | 94.12%         | b. 1             | b. 1             |
| 9  | When $x^2 - 5x + 6 = 0$ and $x^2 - 4 = 0$ , what is the value of x?   | 94.12%         | b. 2             | b. 2             |
| 10 | If $x/a + a/b = 6$ , what is the value of x?  | 47.06%         | e. None of these | a. (–a^2/b) + 6a |
| 11 | If $y = 10x - 16$ and $x = z + 4$ , what is y in terms of z?  | 82.35%         |                  | e. None of these |
|    | If one number exceeds another number by 24 and the larger number is 7/4 times the smaller number, then the smaller number is  | 70.59%         | d. 32            | d. 32            |
| 13 | If x is not a negative number, what is the minimum possible value of 2- 3x?   | 41.18%         | e. None of these | e. None of these |
| 14 | The price of 3 tables and 4 chairs is TK. 3300. With the same money one can buy 2 tables and 10 chairs. If one wants to buy 1 table and 1 chair, how much does he need to pay?  | 52.94%         |                  | b. TK. 1050      |
| 15 | There are 6 working days in a regular week. The regular working hours are 10 hours per day. A man earns TK. 200 per hour for regular work and TK. 300 per hour for overtime. If he earns Tk. 49,500 in 4 weeks, how many hours did he work? | 47.06%         |                  | a. 245           |
| 16 | A man has some hens and cows. If the number of heads are 48 and the number of feet equals 140, then the number of hens will be  | 35.29%         | a. 22            | c. 26            |
| 17 | If x and y are both odd integers, which of the following numbers must be an even integer?   | 58.82%         | b. xy + y^2      | b. xy + y^2      |
| 18 | If x is an odd integer, in which of the following equations must y be an odd integer?  I. xy = 5  II. x+2y=11  III. 2x+y = 12   | 58.82%         |                  | a. Only I        |



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| 19 | Five consecutive integers are given. If the sum of the first three integers is 27, what is the sum of the last three?  | 82.35% | d. 33            | d. 33                      |
|----|--|--------|------------------|----------------------------|
| 20 | When x is divided by 17, the answer is y with a remainder of 3. When x is divided by 13, the answer is z with a remainder of 3. If x, y, and z are all possible integers, what is the remainder of yz/17?  If all chocolates from a box were equally   | 17.65% |                  | a. 0                       |
| 21 | distributed among some children, each child would get 3 chocolates. If four more children are added to the group and you want to give each child 2 chocolates, you will run short by two chocolates. How many chocolates do you have for distribution? | 52.94% |                  | c. 18                      |
| 22 | n is a whole number which when divided by 4 gives 3 as remainder. What will be the remainder when 2n is divided by 4?  | 76.47% | b. 2             | b. 2                       |
| 23 | When a number is divided by 31, the remainder is 29. When the same number is divided by 16, what will be the remainder?  | 35.29% | a. 11            | e. Cannot be<br>determined |
| 24 | A number when divided by 6 leaves a remainder 3. When the square of the same number is divided by 6, the remainder is:   | 64.71% | d. 3             | d. 3                       |
| 25 | If x is an integer and $x>1$ , then $x^2(x^2-1)$ is always divisible by:   | 58.82% | a. 12            | a. 12                      |
| 26 | A number when divided successively in order by 4, 5 and 6. The remainders were respectively 2, 3 and 4. The number is:   | 52.94% | e. None of these | e. None of these           |
| 27 | A number when divided by 3 leaves a remainder 1. When the quotient is divided by 2, it leaves a remainder 1. What will be the remainder when the number is divided by 6?   | 52.94% | b. 3             | c. 4                       |
| 28 | A number when divided by the sum of 555 and 445 gives two times their difference as quotient and 30 as the remainder. The number is:   | 64.71% | e. None of these | e. None of these           |
| 29 | It is being given that (2^32 + 1) is completely divisible by a whole number. Which of the following numbers is completely divisible by this number?  | 23.53% |                  | d. (2^96 + 1)              |
| 30 | If n is an integer divisible by 15 but not by 9, then which of the following CANNOT be an integer?   | 41.18% | e. n/45          | e. n/45                    |
| 31 | The product of two consecutive odd numbers is 22 more than the square of the smaller number. Find the smaller number.  | 58.82% | b. 11            | b. 11                      |



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| 32 | In a certain brick wall, each row of bricks above the bottom row contains one less brick than the row just below it. If there are 5 rows in all and a total of 80 bricks in that wall, how many bricks does the bottom row contain?   | 41.18% | d. 16              | b. 18                |
|----|---|--------|--------------------|----------------------|
| 33 | If $x = (0.18)^2$ , $y = 1/(0.18)^2$ and $z = (1 - 0.18)^2$ .   | 64.71% | C. Z < X < Y       | C. Z < X < Y         |
| 34 | 0.18)^2 – 1, which of the following is true?  Mr. Mukarram, a renowned engineer, designed a ball so that when it was dropped, it rose with each bounce exactly one-half as high as it had fallen. The engineer dropped the ball from a 36-foot platform and caught it after it had traveled 33.75 yards. How many times did the ball bounce?                                  | 5.88%  |                    | d. 4                 |
| 35 | Which of the following is true?   | 76.47% | c. 0.3 < 1/4 < 0.5 | b. 0.12 < 1/7 < 0.15 |
| 36 | 2.205 divided by 0.3 gives  | 70.59% | e. None of these   | a. 7.35              |
| 37 | When positive integer x is divided by positive integer y, the remainder is 7. If x/y = 78.10, what is the value of y?   | 29.41% | b. 70              | b. 70                |
| 38 | By how much is 2/3 larger than 1/5 of 3?  | 70.59% | a. 1/15            | a. 1/15              |
| 39 | In one classroom exactly two fifth of the seats are occupied. In another classroom with double the seating capacity of the first, exactly three quarters of the seats are occupied. If the students from both rooms are transferred into a third empty classroom that has a seating capacity exactly equal to the first two combined, what fraction of the seats in the third | 52.94% | d. 19/30           | d. 19/30             |
|    | A bread is divided into three pieces so that the first piece is four times as big as the second and the second piece is five times as big as the third. What fraction of the entire bread is the smallest piece?  | 52.94% | c. 1/26            | c. 1/26              |
| 41 | If $a/x + x/a = x/b + b/x$ , then $x = ?$   | 47.06% |                    | a. ±√(ab)            |
|    | One-third of a number is equal to two-fifth of another number. If 60 is added to the larger number, it becomes two times the second number. What is the smaller number?   | 11.76% | b. 60              | b. 60                |
| 43 | Which of the following is the largest?  | 41.18% |                    | a. √0.4              |
| 44 | Which of the following fractions is the smallest?   | 41.18% |                    | c. 28/57             |
| 45 | The reciprocal of p/n is n/p and vice versa. Which of the following is the reciprocal of $2/\sqrt{48}$  | 29.41% | e. None of these   | b. 2 √3              |