CAT Mock Test

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Points: 0/1

1. The total cost of 2 pencils, 5 erasers and 7 sharpeners is Rs.30, while 3 pencils and 5 sharpeners cost Rs.15 more than 6 erasers. By what amount (in Rs.) does the cost of 39 erasers and 1 sharpener exceed the cost of 6 pencils?

- 20
- 30 ✓
- 50
- 60

✘

Points: 0/1

2. If the roots of the equation (x + 1) (x + 9) + 8 = 0 are a and b, then the roots of the equation (x + a) (x + b) - 8 = 0 are

- 1 and 2 ✓
- -4 and -6
- 4 and 6
- Cannot be determined

✘

Points: 0/1

3. What is the remainder when 7700 is divided by 100?

- 1 ✓
- 61
- 41
- 21

✘

Points: 0/1

4. In the figure below, P, Q and R are points on a circle with centre O. The tangent to the circle at R intersects secant PQ at T. If □QRT = 55° and □QTR = 25°, find □POQ.

- (1) 110°
- (2) 100°
- (3) 90° ✓
- (4) 50°

✘

Points: 0/1

5. A sequence of 4 digits, when considered as a number in base 10 is four times the number it represents in base 6. What is the sum of the digits of the sequence?

- (1) 7
- (2) 6
- (3) 9
- (4) 8 ✓

✘

Points: 0/1

6. Some friends planned to contribute equally to jointly buy a CD player. However, two of them decided to withdraw at the last minute. As a result, each of the others had to shell out one rupee more than what they had planned for. If the price (in Rs.) of the CD player is an integer between 1000 and 1100, find the number of friends who actually contributed?

- (1) 21
- (2) 23
- (3) 44 ✓
- (4) 46

✘

Points: 0/1

7. If N = 888Dup to 100 digits, what is the remainder when N is divided by 625?

- (1) 128
- (2) 138 ✓
- (3) 338
- (4) 388

✘

Points: 0/1

8. If [log101] + [log102] + [log103] + [log104] + ... + [log10n] = n, where [x] denotes the greatest integer less than or equal to x, then

- (1) 96 ≤ n < 104
- (2) 104 ≤ n < 107
- (3) 107 ≤ n < 111 ✓
- (4) 111 ≤ n < 116

✘

Points: 0/1

9. If [log101] + [log102] + [log103] + [log104] + ... + [log10n] = n, where [x] denotes the greatest integer less than or equal to x, then

- (1) 96 ≤ n < 104
- (2) 104 ≤ n < 107
- (3) 107 ≤ n < 111 ✓
- (4) 111 ≤ n < 116

✘

Points: 0/1

10. A regular polygon has an even number of sides. If the product of the length of its side and the distance between two opposite sides is of its area, find the number of sides it has.

- (1) 6
- (2) 8
- (3) 20
- (4) 16 ✓
