Test Paper 5 Solutions

Code: 2026/DataHandling/C7/05

1. The first five multiples of 3 are 3, 6, 9, 12, 15. Mean:

$$\frac{3+6+9+12+15}{5} = \frac{45}{5} = 9$$

$\boxed{9}$

2. Arrange the data in ascending order: 41, 43, 57, 58, 61, 71, 92, 99, 127. The median is the middle value:

$$\text{Median} = 61$$

$\boxed{61}$

3. For 15 to be the mode, it must appear more frequently than any other number. Therefore, $x = 15$. $\boxed{15}$

4. Savings:

$$\frac{36^\circ}{360^\circ} \times 50,000 = 5,000$$

$\boxed{5,000}$

5. Total of 7 observations:

$$7 \times 8 = 56$$

Total of 8 observations:

$$56 + 16 = 72$$

New mean:

$$\frac{72}{8} = 9$$

$\boxed{9}$

6. Total balls: $3 + 2 + 5 = 10$. Probability of not picking a red ball:

$$\frac{7}{10}$$

$\boxed{\frac{7}{10}}$

7. Range:

$$21 - 4 = 17$$

$\boxed{17}$

8. None of the given options are universally true. $\boxed{\text{None}}$

9. The space between bars must be equal. $\boxed{\text{Must be equal}}$

10. The first 10 even natural numbers are 2, 4, 6, 8, 10, 12, 14, 16, 18, 20. Mean:

$$\frac{2+4+6+8+10+12+14+16+18+20}{10} = \frac{110}{10} = 11$$

$\boxed{11}$

11. The sum of deviations from the mean is always zero. $\boxed{0}$

12. Sector angle:

$$0.5 \times 360^\circ = 180^\circ$$

$\boxed{180}$

13. The median of an even number of observations is the average of the two middle values:

$$\frac{6+8}{2} = 7$$

$\boxed{7}$

14. Probability of getting 7 on a standard die is 0. $\boxed{0}$

15. Total of 6 observations:

$$6 \times 7 = 42$$

Sum of known observations:

$$4+7+2+8 = 21$$

Therefore:

$$x + y = 42 - 21 = 21$$

$\boxed{21}$