Test Paper 4 Solutions

Code: 2026/DataHandling/C7/04

1. Given the mean of the numbers is 14:

$$\frac{11+15+17+(y+1)+19+(y-2)}{6}=14$$

$$61+2y=84 \implies 2y=23 \implies y=11.5$$

Since 11.5 is not an option, recheck the calculation:

$$11+15+17+y+1+19+y-2=60+2y$$

$$\frac{60+2y}{6}=14 \implies 60+2y=84 \implies 2y=24 \implies y=12$$

$\boxed{12}$

2. The mode is the most frequently occurring value, which is 15. $\boxed{15}$

3. Arrange the terms in ascending order: $\frac{x}{5}, \frac{x}{4}, \frac{x}{3}, \frac{x}{2}, x$. The median is the middle value:

$$\frac{x}{3}=8 \implies x=24$$

$\boxed{24}$

4. Central angle:

$$\frac{15}{60}\times 360^\circ = 90^\circ$$

$\boxed{90}$

5. Prime numbers on a dice: 2, 3, 5. Probability:

$$\frac{3}{6}=\frac{1}{2}$$

$\boxed{\frac{1}{2}}$

6. The number of observations n:

$$n=\frac{\sum x}{\bar{x}}$$

$\boxed{\frac{\sum x}{\bar{x}}}$

7. The tally mark $\cancel{||||}$ $|||$ represents 7. $\boxed{7}$

8. The first 10 whole numbers are 0, 1, 2, ..., 9. Range:

$$9-0=9$$

$\boxed{9}$

9. The measure used to divide a data set into two equal halves is the median. $\boxed{\text{Median}}$

10. Percentage:

$$\frac{72^\circ}{360^\circ} \times 100 = 20\%$$

$\boxed{20\%}$

11. Mean:

$$\frac{\frac{1}{2} + \frac{1}{4} + \frac{1}{4}}{3} = \frac{\frac{1}{2} + \frac{1}{2}}{3} = \frac{1}{3}$$

$\boxed{\frac{1}{3}}$

12. If a data set has two modes, it is called bimodal. $\boxed{\text{Bimodal}}$

13. A bar of height 7.2 units represents:

$$7.2 \times 100 = 720$$

$\boxed{720}$

14. The probability of a "Sure Event" is 1. $\boxed{1}$

15. Sum of observations:

$$5 \times 10 = 50$$

$\boxed{50}$