

Mathematical Literacy 4 - Module 5

Name:

Marks Available: 60

Time: 45 minutes

Question 1:

Choose the correct answer:

1. If an unbiased coin was flipped 4 times and each time resulted in tails, the probability of the next coin being a head is:
 - a. 80%
 - b. 50%
 - c. 20%
 - d. 100%
2. The probability of throwing a 6 and tossing a coin with the result of a head is:
 - a. $\frac{1}{36}$
 - b. $\frac{1}{12}$
 - c. $\frac{1}{8}$
 - d. $\frac{2}{3}$
3. Extrapolation means:
 - a. Estimation of a value within a range of data points.
 - b. Estimation of a value outside a range of data points.
 - c. The odds in a horse race.
 - d. Calculating independent probabilities.
4. If the sales of one product in a shop is $\frac{7}{150}$, to represent it on a pie chart you would use _____ degrees.
 - a. 4.66°
 - b. 0.046°
 - c. 16.8°
 - d. 1680°
5. The best way to represent the movement of monthly sales of the last ten years would be:
 - a. A line graph
 - b. A bar chart
 - c. A pie chart
 - d. A scatterplot

Question 2:

The average of the Pakistan and New-Zealand cricket teams are as follows:

Pakistan			New Zealand		
Batsman	Position	Average	Batsman	Position	Average
Abdul Razzaq	8	29.79	S.E. Bond	11	14.26
Kamran Akmal	7	26.48	I.G. Butler	10	9.57
Khalid Latif	2	62.00	M.J. Gutpill	3	44.26
Mohammed Aamer	9	35	B.B. McCallum	2	28.20
Mohammed Yousuf	4	42.90	N.L. McCallum	8	0.00
Saeed Ajmal	11	12	J.D.P. Oram	6	24.40
Salman Butt	1	37.83	A.J. Redmond	1	28.50
Shahid Afridi	6	23.16	T.G. Southee	9	13.71
Umar Akmal	5	49.83	S.B. Styris	5	32.58
Umar Gul	10	10.22	L.R.P.L Taylor	4	35.92
Younis Khan	3	33.38	D.L. Vettori	7	16.00

1. Calculate the mean and median batting averages of each team. (6)

2. Calculate the range of each team. (2)

3. Calculate the interquartile values of each team. (8)

4. Draw a box and whisker plot (6)

5. Do any values seem out of place? Why might this be? (3)

Question 3:

1. Using the data above, draw a scatterplot plotting the batting position vs. the number of runs for both teams in the same set of axes. (12)

2. Comment on your findings (3)

