

Vidhigya Challenger Series
Daily Practice Sheet 1
Quantitative Techniques

Directions (1-5): Read the following information carefully and answer the questions that follow.

Following table represents the number of 4's hit by players in three editions of IPL: 2019, 2020, and 2021. The five players are Virat Kohli, Rohit Sharma, Shubhman Gill, Hardik Pandya and Suryakumar Yadav. Each 4 fetches four Runs. Ratio of 4's hit by Suryakumar Yadav in 2020 to 2021 is 19:21.

Players	2019	2020	2021	Total 4	Runs Scored in four
Virat Kohli	20		10		220
Rohit Sharma	18			68	
Shubhman Gill	15		24		244
Hardik Pandya	10	15			
Suryakumar Yadav					204
Total		104	112		1160

- What is the ratio of the no. of 4's hit by Hardik Pandya in 2019, 2020 and 2021 respectively?
 (a) 3:2:6 (b) 2:3:6
 (c) 3:2:5 (d) 2:3:5
- The number of 4's hit by Virat Kohli in 2020 is what percent of that of Hardik Pandya in 2021?
 (a) 50% (b) 66.67%
 (c) 83.3 % (d) 87.5%
- What is the ratio of difference in number of 4's hit by Rohit Sharma in 2020 and 2021 to the difference in number of 4's hit by Surya Kumar Yadav in 2020 and 2021?
 (a) 2:1 (b) 1:2
 (c) 2:3 (d) 3:2
- Total number of 4's scored by Surya Kumar Yadav?
 (a) 47 (b) 51
 (c) 53 (d) 57
- Difference between number of 4's scored by Virat Kohli in 2019 and 2020 is what percent of total no. of 4's scored by Hardik Pandya?
 (a) 11.11% (b) 9.09%
 (c) 13.13% (d) 15.15%

Answers & Explanations

1. Ans. b

Sol. COMMON EXPLANATION

Total 4's hit by all players in 3 years = $1160/4 = 290$

4's hit in 2019 = $290 - 104 - 112 = 74$

4's hit by Surya Kumar Yadav in 2019 = $74 - 20 - 18 - 15 - 10 = 11$

Total 4's hit by Surya Kumar Yadav in 3 years = $204/4 = 51$

Ratio of 4's hit by Surya Kumar Yadav in 2020 and 2021 is 19:21. Let them be 19a and 21a.

$11 + 19a + 21a = 51$

$a = 1$

4's hit by Surya Kumar Yadav in 2020 and 2021 are 19 and 21 respectively.

Total 4's hit by Shubhman Gill in 3 years = $244/4 = 61$

4's by Shubhman Gill in 2020 = $61 - 15 - 24 = 22$

Total 4's by Virat Kohli in 3 years = $220/4 = 55$
 4's by Virat Kohli in 2020 = $55-20-10 = 25$
 Total 4's scored by Hardik Pandya in 3 years = $290-55-68-61-51 = 55$
 4's scored by Hardik Pandya in 2021 = $55-10-15 = 30$
 4's scored by Rohit Sharma in 2020 = $104-25-22-15-19 = 23$
 4's scored by Rohit Sharma in 2021 = $112-10-24-30-21 = 27$
 Runs scored by Rohit Sharma by 4's = $68 \times 4 = 272$
 Runs scored by Hardik Pandya by 4's = $55 \times 4 = 220$

Players	2019	2020	2021	Total 4	Runs Scored in four
Virat Kohli	20	25	10	55	220
Rohit Sharma	18	23	27	68	272
Shubhman Gill	15	22	24	61	244
Hardik Pandya	10	15	30	55	220
Suryakumar Yadav	11	19	21	51	204
Total	74	104	112	290	1160

From the table,
 Ratio of 4's scored by Hardik Pandya = $10:15:30 = 2:3:6$
 Hence, option (b) is correct.

2. Ans. c

Sol. FOLLOWING THE COMMON EXPLANATION

4's by Virat Kohli in 2020 = 25
 4's by Hardik Pandya in 2021 = 30

$$\rightarrow \frac{25}{30} \times 100 = 83.3\%$$

Hence, option (c) is correct.

3. Ans. a

Sol. FOLLOWING THE COMMON EXPLANATION

Difference of 4's of Rohit Sharma in given years = $27-23 = 4$
 Difference of 4's of Surya Kumar Yadav in given years = $21-19 = 2$
 Ratio = $4:2 = 2:1$
 Hence, option (a) is correct.

4. Ans. b

Sol. FOLLOWING THE COMMON EXPLANATION

Total 4's scored by Surya Kumar Yadav = $204/4 = 51$
 Hence, option (b) is correct.

5. Ans. b

Sol. FOLLOWING THE COMMON EXPLANATION

Difference between number of 4's scored by Virat Kohli in 2019 and 2020 = $25-20 = 5$
 Number of 4's by Hardik Pandya = 55

$$\rightarrow \frac{5}{55} \times 100$$

$$\rightarrow 9.09\%$$

Hence, option (b) is correct.