Part 1 :

##Challenge 1

Find a and b, if median=42, mean=50 20,34, 34, 12, 56, 110, 49, a, b

solution:

a = 93

b = 42

##Challenge 2

average = (60+110)/2=85

###Challenge3:

the percentage of bulbs with lifetime less than 480 hours.

240 + ((480-399,5)/200) \* (304-240) = 265,8

#Challenge 4:

Determine the median, mean and standard deviation for this dataset.

mean = 25,1

Mediane = 8,5

STD = 3,92

Part2 :

Challenge 1:

One player rolls two dices. Describe the measurable space and the random variable for:

A- 1-1, 1-2, 1-3, 1-4, 1-5, 1-6

2-1, 2-2, 2-3, 2-4, 2-5, 2-6

3-1, 3-2, 3-3, 3-4, 3-5, 3-6

4-1, 4-2, 4-3, 4-4, 4-5, 4-6

5-1, 5-2, 5-3, 5-4, 5-5, 5-6

6-1, 6-2, 6-3, 6-4, 6-5, 6-6

B- 2, 3, 4, 5, 6, 7

3, 4, 5, 6, 7, 8

4, 5, 6, 7, 8, 9

5, 6, 7, 8, 9, 10

6, 7, 8, 9, 10, 11

7, 8, 9, 10, 11, 12

C- 12

Describe the following events:

Case A : Case A: Both values are greater than 5 = 6,6

Case B: The sum of values is even = the rwo rolls are 6,6

Case C: The maximum is the value of both rolls = = the rwo rolls are 6,6

we have always the mas of rolls

Challenge 2:

A. The number of figures he picks = Ace, 2,3,4,5,6,7,8,9,10, jack, queen , king

B. The sum of card values. Consider that the value of figures is 10 and the value of aces is 15, the sum of card of value 75/3 = 25

C. The number of hearts or spades he picks:2 SPADES, 2 hearts or 1 hearts, 1speades

Case A: The number of figures in the cards the player picked is two = 2/3 , 5/4, 2/4 ....

Case B: The sum of card values is 17. R/V/D and 7 or 9/8

Case C: The value of both cards is less than 8. we can have here 2/3,2/4, 2/5, 3/3, 3/4, 4/2

Challenge 3 :

Two players roll a dice. Describe the measurable space and the random variable for:

A. The score of player A : 6

B. The greatest score : 6/6

C. The earnings of player A if the game rules state that:

"The player with the greatest score gets a coin from the other player." : 6\*une pièce..

D. The earnings of player A if the game rules state that:

"The player with the greatest score gets as many coins as the difference between the score of player A and player B.": he will be 5 piece as mas , because the max difference is 5.