	The table shows the relative frequency of a 5 sideo					The table sh	lows the		
	spinner.	Blue	0.15			spinner.	В		
		Red	0.10				P		
		Diad	0.4						
		Black	Х				В		
		Yellov	v x				Y		
		Greer	n 0.25				G		
	(i) How man	y Blacks wo	uld you expe	ect to spin if		(i) How man	y Blacks		
	you spun the spinner 500 times?					you spun the spinner			
	(ii) What is the probability of spinning 4 reds in a					(ii) What is t	he proba		
	(iii) What is t	row? (iii) What is the probability of not spinning a Yellow				(iii) What is t	the prob		
	if you spin the spinner once?					if you spin the spinne			
	(iv) Is spinning 3 Blues in a row independent or					(iv) Is spinning 3 Blu			
	dependent?					dependent?			
	Bag A and bag B each contain only blue marbles.					lim adds ten red ma			
	¹ / ₂ of the marbles in bag A are now red.					¹ / ₂ of the marbles in b			
	¹ ⁄ ₄ of the marbles in bag B are now red.					¹ / ₄ of the marbles in b			
	Jim puts all the marbles into one bag.					Jim puts all the marb			
	He picks a marble at random from the bag.					He picks a marble at			
	Fred does fo	Fred does for a meal. The probability he has				Fred does for a mea			
	potatoes with	n his meal is	0.4. The pr	obability he		potatoes with his me			
	has peas with his meal is 0.7 (they are independent					has peas with his me			
events)						events)			
	What is the probability (a) He has potatoes but n peas with his meal? (b) He has neither?					neas with his meal?			
	A drawer contains 8 white socks, 2 blue socks and					A drawer contains 8			
	1 black sock. What is the probability if two socks					1 black sock. What is			
	are taken at random they are a matching pair?					are taken at random			
	I he table be	low shows t	he holiday d	estinations of		The table be	elow sho		
	ou people al	Hotel	Tent	Total		ou people a	Hotel		
	Paris	3	. ont	5		Paris	3		
	London					London			
	NYC		2	12		NYC			
	Rome	15	45	20		Rome	15		
		the table			(a) Complet	o tho tab			
	 (a) Complete the table (b) Find the probability someone stays in London in a tent (c) Find the probability someone stays in NYC (d) Find the probability someone doesn't stay in a tent in Paris. (e) Find the probability that if 3 people were charged from the complete 					(b) Find the probabili			
						a tent (c) Fir	nd the pr		
						NYC (d) Fin	d the pro		
						in a tent in F	Paris. (e)		
	they would all be in Hotels in Rome					they would a	all be in l		
	The probabil	The probability of a train being late is 0.4 if the last				The probabi	lity of a t		
	one was late	one was late and 0.7 if the last one was on time.				one was late	e and 0.7		
	Given the last train was late find the probability (a)					Given the la	st train v		
	and the following one is on time					the next two	are on t		
	Draw a Venr	Draw a Venn diagram to show the information				Draw a Ven	n diagrai		
	about 100 st	about 100 students.				about 100 students.			
	10 were tall,	10 were tall, left handed boys.					left han		
	handed 35 were left handed 15 were tall and left					17 were left handed			
	were tall and	were tall and 42 were boys.					were tall and 42 were		
	(a) Find the	probability of	f a girl being	chosen at		(a) Find the	probabil		
	random from	the student	s who was s	short and right		random fron	n the stu		
	handed.					handed.			

relative frequency of a 5 sided The table shows the relative frequency of a 5 sided spinner. lue 0.15 Blue ed 0.4 Red lack х Black ellow Yellow Х reen 0.25 Green would you expect to spin if (i) How many Blacks would you expect to spin if r 500 times? you spun the spinner 500 times? ability of spinning 4 reds in a (ii) What is the probability of spinning 4 reds in a row? (iii) What is the probability of not spinning a Yellow ability of not spinning a Yellow er once? if you spin the spinner once? (iv) Is spinning 3 Blues in a row independent or les in a row independent or dependent? ch contain only blue marbles. Bag A and bag B each contain only blue marbles. arbles to each bag. Jim adds ten red marbles to each bag. bag A are now red. $\frac{1}{2}$ of the marbles in bag A are now red. bag B are now red. 1/4 of the marbles in bag B are now red. bles into one bag. Jim puts all the marbles into one bag. He picks a marble at random from the bag. t random from the bag. ity that he picks a **blue** marble? What is the probability that he picks a **blue** marble? al. The probability he has Fred goes for a meal. The probability he has eal is 0.4. The probability he potatoes with his meal is 0.4. The probability he eal is 0.7 (they are independent has peas with his meal is 0.7 (they are independent events) ity (a) He has potatoes but not What is the probability (a) He has potatoes but not (b) He has neither? peas with his meal? (b) He has neither? white socks. 2 blue socks and A drawer contains 8 white socks, 2 blue socks and s the probability if two socks 1 black sock. What is the probability if two socks they are a matching pair? are taken at random they are a matching pair? ws the holiday destinations of The table below shows the holiday destinations of pe of accommodation chosen. 60 people and the type of accommodation chosen. Tent Total Hotel 5 Paris 3 London 2 12 NYC 20 15 Rome 15 Total le (a) Complete the table lity someone stays in London in (b) Find the probability someone stays in London in obability someone stays in a tent (c) Find the probability someone stays in NYC (d) Find the probability someone doesn't stay obability someone doesn't stay Find the probability that if 3 in a tent in Paris. (e) Find the probability that if 3 at ransom from the sample people were chosen at ransom from the sample Hotels in Rome. they would all be in Hotels in Rome. train being late is 0.4 if the last The probability of a train being late is 0.4 if the last 7 if the last one was on time. one was late and 0.7 if the last one was on time. was late find the probability (a) Given the last train was late find the probability (a) time (b) the next one is later the next two are on time (b) the next one is later and the following one is on time. ne is on time. am to show the information Draw a Venn diagram to show the information about 100 students. 10 were tall, left handed boys. ded boys. boys, 18 were tall and left 17 were left handed boys, 18 were tall and left handed. 35 were left handed. 15 were tall boys. 41 ft handed. 15 were tall boys. 41 were tall and 42 were boys. re boys. lity of a girl being chosen at (a) Find the probability of a girl being chosen at random from the students who was short and right dents who was short and right handed.

0.15

0.4

х

х

Tent

2

15

Total

5

12

20

0.25

The table shows the relative frequency of a 5 sided spinner. Blue 0.15 0.4 Red Black х Yellow х Green 0.25 (i) How many Blacks would you expect to spin if you spun the spinner 500 times? (ii) What is the probability of spinning 4 reds in a row? (iii) What is the probability of not spinning a Yellow if you spin the spinner once? (iv) Is spinning 3 Blues in a row independent or dependent? Bag A and bag B each contain only blue marbles. Jim adds ten red marbles to each bag. ¹/₂ of the marbles in bag A are now red. 1/4 of the marbles in bag B are now red. Jim puts all the marbles into one bag. He picks a marble at random from the bag. What is the probability that he picks a **blue** marble? Fred goes for a meal. The probability he has potatoes with his meal is 0.4. The probability he has peas with his meal is 0.7 (they are independent events) What is the probability (a) He has potatoes but not peas with his meal? (b) He has neither? A drawer contains 8 white socks, 2 blue socks and 1 black sock. What is the probability if two socks are taken at random they are a matching pair? The table below shows the holiday destinations of 60 people and the type of accommodation chosen. Hotel Tent Total Paris 3 5 London NYC 2 12 15 20 Rome Total 15 (a) Complete the table (b) Find the probability someone stays in London in a tent (c) Find the probability someone stays in NYC (d) Find the probability someone doesn't stay in a tent in Paris. (e) Find the probability that if 3 people were chosen at ransom from the sample they would all be in Hotels in Rome. The probability of a train being late is 0.4 if the last one was late and 0.7 if the last one was on time. Given the last train was late find the probability (a) the next two are on time (b) the next one is later and the following one is on time. Draw a Venn diagram to show the information about 100 students. 10 were tall, left handed boys. 17 were left handed boys, 18 were tall and left handed. 35 were left handed. 15 were tall boys. 41 were tall and 42 were boys. (a) Find the probability of a girl being chosen at random from the students who was short and right handed.