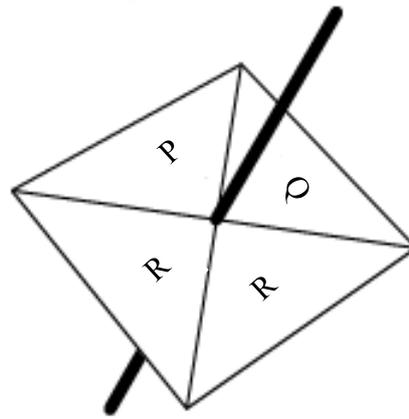
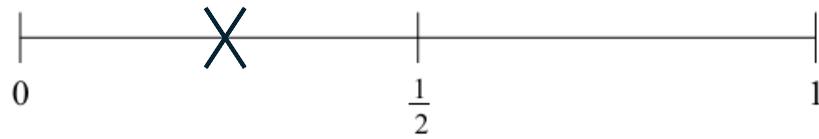


Q1.



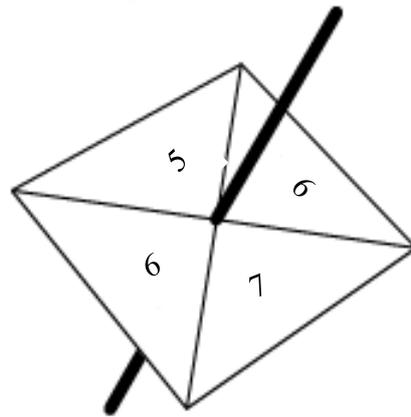
(a)



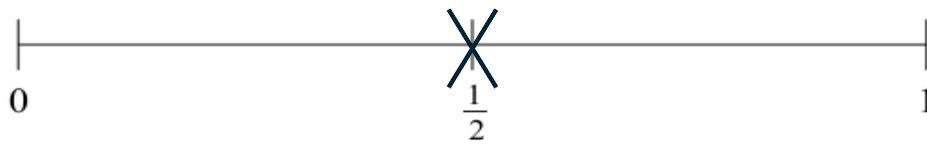
(b)

$$\frac{2}{4} \text{ or } \frac{1}{2}$$

Q2.

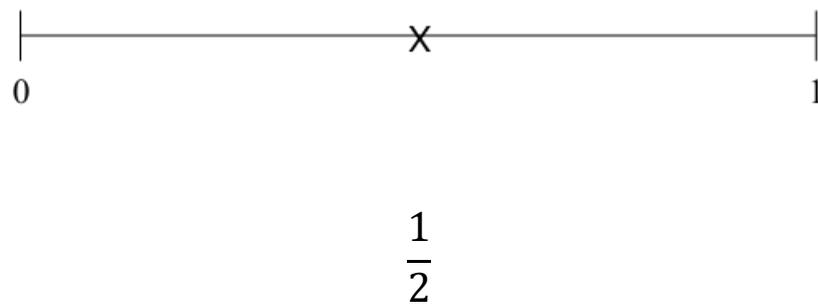


(a)



(b) 0

Q3.



Q4.

$\frac{1}{8}$

Q5.

(a)

$$\text{Probability of green} = \frac{\text{Number of green pencils}}{\text{Total Number of Balls}}$$

$$\text{Probability of green} = \frac{10}{30}$$

$$\text{Probability of green} = \frac{1}{3}$$

(b)

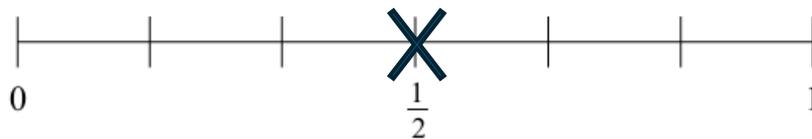
$$\text{Probability of black} = \frac{\text{Number of black pencils}}{\text{Total Number of Balls}}$$

$$\text{Probability of black} = \frac{0}{30}$$

$$\text{Probability of black} = 0$$

Q6.

(a)

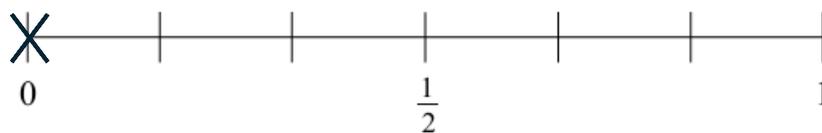


(b)

$$\frac{4}{6} \text{ or } \frac{2}{3}$$

Q7.

(a)

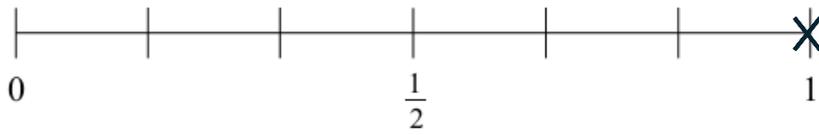


(b)

$$\frac{1}{6}$$

Q8.

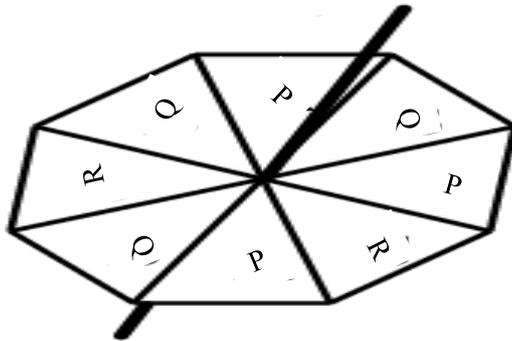
(a)



(b)

$$\frac{1}{6}$$

Q9.



(a)

$$\frac{1}{6}$$

Q10.

(a)

$$\frac{1}{400}$$

(b)

$$1 - \frac{1}{400} = \frac{399}{400}$$

Q11.

$$P(\text{Brooklyn Wins}) = \frac{3}{14}$$

$$P(\text{Brooklyn does not win}) = 1 - \frac{3}{14} = \frac{11}{14}$$

Q12.

$$P(\text{Tom wins}) = 0.9$$

Since the total probability must equal 1,

$$P(\text{Tom does not win}) = 1 - P(\text{Tom wins})$$

$$P(\text{Tom does not win}) = 1 - 0.9 = 0.10$$

Q13.

$$\text{Probability of blue} = \frac{\text{Number of blue candies}}{\text{Total Candies}}$$

$$\text{Probability of blue} = \frac{12}{30} = \frac{2}{5}$$

Q14.

$$\text{Yellow balls} = 24 - (8 + 6) = 24 - 14 = 10$$

$$\text{Probability of yellow} = \frac{\text{Number of yellow balls}}{\text{Total balls}}$$

$$\text{Probability of yellow balls} = \frac{10}{24} = \frac{5}{12}$$

Q15.

$$\text{Yellow marbles} = 45 - 18 = 27$$

$$\text{Probability of marbles} = \frac{\text{Number of yellow marbles}}{\text{Total marbles}}$$

$$\text{Probability of yellow balls} = \frac{27}{45} = \frac{3}{5}$$

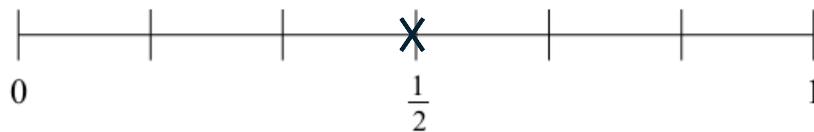
Q16.

$$P(\text{Ali Wins}) = \frac{12}{400} = \frac{3}{100}$$

$$P(\text{Ali does not win}) = 1 - P(\text{Ali Wins}) = 1 - \frac{3}{100} = \frac{97}{100}$$

Q17.

(a)



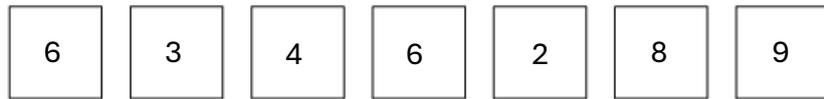
(b)



(c)

$$\frac{3}{10}$$

Q18.



(a)

$$\frac{2}{7}$$

(b)

$$\frac{5}{7}$$

Q19.

Colour	Gray	Pink	White	Black
Number of Counters	2	4	6	8

(a)

$$\text{Total counters} = 2+4+6+8 = 20$$

$$\frac{8}{20} \text{ or } \frac{2}{5}$$

(b)

$$\frac{16}{20} \text{ or } \frac{4}{5}$$

Q20.

$$\text{Total sweets} = 9+6+5 = 20$$

$$\frac{5}{20} \text{ or } \frac{1}{4}$$

Q21.

Colour	Red	Blue	Yellow	Green
Probability	0.4	0.3	0.2	

Complete the table to show the probability that the counter will be green.

Probability of Green = $1 - 0.4 - 0.3 - 0.2 = 0.1$
