→ company → 1 company multiple shares

Stocks and Shares

1) Stock-capital: The total amount of money needed to run the company is called the stock-capital.

2) Dividend: The annual profit distributed among shareholders.

3) Face value: The value of share or stock printed on the share-certificate is called face value.

5) Market-value: - The stocks of different companies are sold and bought in the open market through brokers at stock-exchanges. A stock or share said to be-

i) At Premium or above Par: market value > face value

ii) At Par: market value = face value.

iii) At discount or below Par: market value < face value

4) Brokerage: The broker's charge is called brokerage

(i) when stock is purchased brokerage is added to the cost price.

(ii) when stock is sold brokerage is subtract from the selling price.

Remember:-

(i) The face value of a share always remains the same

(ii) The market value of a share change from time to time

(iii) Dividend is always paid on the face value of a share.

(iv) Number of shares held by a person

$$= \frac{\text{Total investment}}{\text{investment in 1 share}} = \frac{\text{Total income}}{\text{income from 1 share}} = \frac{\text{Total face value}}{\text{Face value of 1 share}}$$

Thus, by a ₹100 9% stock at 120, we mean that:

(i) Face value of stock = ₹100

(ii) Market value of stock = ₹120

(iii) Dividend = 9%

* 9% stock at 120 ⇒ we got 9 rupees profit in 120 rupees

* Dividend (income) always calculated on face values

1) In order to obtain an income of RS. 650 from 10% stock at RS. 96, one must make an investment of RS. 6240

$\Rightarrow x \times \frac{10}{96} = 650$

$\Rightarrow x = \frac{96 \times 650}{10} = 6240$

2) RS. 9800 are invested partly in 9% stock at 75 and 10% stock at 80 to have equal amount of incomes. The investment in 9% stock is;

$\Rightarrow x \times \frac{\cancel{9}^{3}}{\cancel{75}_{25}} = y \times \frac{\cancel{10}}{\cancel{80}}$

$\Rightarrow \frac{x}{y} = \frac{1}{8} \times \frac{25}{3}$

$\Rightarrow \frac{x}{7} = \frac{25}{24}$

$\therefore$ The investment in 9% stock is

$= \cancel{9800}^{200} \times \frac{25}{49} = 5000$

3) A 6% stock yields 8%. The market value of the stock is ₹75

$\Rightarrow$ 6% stock at ?

₹8 $\longrightarrow$ 100

1 $\longrightarrow$ $\frac{100}{8}$

6 $\longrightarrow$ $\frac{\cancel{100}^{25}}{\cancel{8}_{2}} \times \cancel{6}^{3} = 75$

4) The cost price of a ₹100 stock at 4 discount, when brokerage is 1/4 %. is _____

⇒ F.V = 100
M.V = 96

∴ Cost Price = $96 + 96 \times \frac{1}{4}\%$

$= 96 + 0.24 = 96.24$

5) How many shares of market value ₹25 each can be purchased for ₹12750, brokerage being 2%.

⇒ Per share cost $= 25 + 25 \times 2\%$

$= 25 + 25 \times \frac{2}{100}$

$= 25 + 0.5 = 25.5$

∴ Total share $= \frac{12750}{25.5} = 500$

6) A man wants to secure an annual income of ₹1500 by investing in 15% debentures of face value ₹100 each and available for ₹104 each. If the brokerage is 1%, then the sum of money he should invest is _____

⇒ Face value = 100 and 15% debentures

∴ Per share income $= 100 \times \frac{15}{100}$

$= ₹15$

∴ Need of total shares $= \frac{1500}{15}$

$= 100$

Now for buy one share cost is —

$104 + 104 \times \frac{1}{100}$

$= 104 + 1.04$

$= 105.04$

∴ Total sum of money $= 100 \times 105.04$

$= ₹10504.00$

7) A man invested ₹4455 in ₹10 shares quoted at ₹8.25. If the rate of divident be 12%, his annual income

=) Total no of shares $= \frac{4455}{8.25}$

$= 540$ shares

Divident per share $=$ 12% of 10

$= 10 \times \frac{12}{100}$

$= 1.2$ rupees

$\therefore$ Income $= 540 \times 1.2$

$= 648.0 =$ ₹648

Permutation and combination

* n things → we arrange $n!$ ways.

* In a circular method, n thing → we arrange $(n-1)!$ ways

* $^nP_r = \frac{n!}{(n-r)!}$

* $^nC_r = \frac{n!}{r! \times (n-r)!}$

Note
i) when select → P
ii) when select and arrange → C

Q.1) Find the number of ways in which ten different flowers can be strung together to make garland in such a way three particular flowers are always together

⇒ Total = 10 flowers
3 flower are always be together
∴ Remaining flower = 10 − 3 = 7

∴ 7 + (3 are together) = 8

↓

3!

In a circular so we arrange $(8-1) = 7!$ ways
and the 3 together are in $3!$ ways
∴ Total number of ways $= 7! \times 3!$
$= 30240$

Q.2) Seven book are to be arranged in such a way so that two particular books are always at first and last place. Find the number of arrangement

⇒ a _ _ _ _ _ b

5!

a, b can be arrange in $2!$ ways

∴ Total number of arrangement = 5!

Q.3) In how many ways can the letter of the word "LEADER" be arranged?

$\Rightarrow \frac{6!}{2!} = \frac{720}{2} = 360$

Note: $\frac{(\text{Total letter})!}{(\text{times repeat of})!}$

Q.4) How many different words can be formed with "CUSTOM" with a condition that the word should begin with M

$\Rightarrow$ M _ _ _ _ _

$5! = 120$

Q.5) In how many ways a committee consisting of 5 men and 6 women can be formed from 8 men and 10 women?

$\Rightarrow {}^8C_5 \times {}^{10}C_6$

$= \frac{8!}{5! \times 3!} \times \frac{10!}{6! \times 4!}$

$= \frac{8 \times 7 \times 6 \times 5!}{5! \times 6} \times \frac{10 \times 9 \times 8 \times 7 \times 6!}{6! \times 4 \times 3 \times 2 \times 1}$

$= 56 \times 210 = 11760$

Q.6) How many three-digit even numbers can be formed using the digits 1, 2, 3, 4 and 5 when repetition of digit is not allowed.

_ _ _

2, 4

$4 \times 3 \times 2 = 24$

Q.7) In how many ways the letter of word "CAPITAL" be arranged so that vowels come together?

$\Rightarrow$ C P T L (AI)

$5! \times 3!$

Q.8) In how many different ways can the letter of word "EXTRA" be arranged so that the vowel are never together

=> Total ways — always together

∴ Total ways = 5! = 120 ways

∴ If alway together then

X T R (E A)

∴ 4! × 2! = 48 ways

∴ Never together = 120 − 48 = 72 ways

Q.9) In a class, there are 15 students. During a christmas party all of them shook hands with each other only once. How many handshakes took place in the class?

=> $^{15}C_2 = {}^{15}C_{13} = \frac{15 \times 14 \times 13!}{13! \times 2!}$

= 105

Note) same type, In a cricket league 9 teams how many way they can play with each other only once.

=> $^{9}C_2 = {}^{9}C_7 = \frac{9 \times 8 \times 7!}{7! \times 2!} = 36$

Q.10) How many ways 4 Boys and 3 girls can be seated in a row so that they are alternative

=> B G B G B G B | G B G B G B B X

B → 4!

G → 3!

Q.11) In the same question, so that two girls are never together (less asked)

=> _ B _ B _ B _ B _

∴ 4 B → 4!

5 place of girl of 3 girl → $^{5}C_3 \times 3!$

∴ $4! \times {}^{5}C_3 \times 3!$

= 1440

Probability

And → ×
OR → +

Cards → 52 card
- → 13 spade - Black
- → 13 heart → Red
- → 13 club → Black
- → 13 diamond → Red

2 – 10, Jack, King, Queen, Ace

- → face card = {K, Q, J} → 12
- → Honor = {A, K, Q, J} → 4×4 = 16
- → simple = {2, 3 – 10} = 9×4 = 36

1) What will be the Probability of drawing a jack or a spade from a well shuffled deck of 52 playing cards?

$$\Rightarrow \frac{4}{52} + \frac{13}{52} - \frac{1}{52}$$

$$= \frac{16}{52} = \frac{4}{13}$$

no of jack = 4
no of spade = 13
* we subtract b/c jack is also under spade.

2) A box has 6 black, 4 red, 2 white and 3 blue shirts. When 2 shirts are picked randomly, what is the probability that either both are white or both are blue.

$$\Rightarrow \frac{{}^2C_2 + {}^3C_2}{{}^{15}C_2}$$

$$= \frac{1+3}{105} = \frac{4}{105}$$

Another way

2W OR 2B
↓ ↓
1W + 1W (+) 1B + 1B

$$\therefore \frac{2}{15} \times \frac{1}{14} + \frac{3}{15} \times \frac{2}{14}$$

$$= \frac{1}{105} + \frac{3}{105} = \frac{4}{105}$$

3) A Pot has 2 white, 6 black, 4 grey and 8 green balls. If one ball is picked randomly from the Pot, what is the Probability of it being black or green?

$$\Rightarrow \frac{6+8}{20} = \frac{14}{20} = \frac{7}{10}$$

4) There are 2 Pots. One Pot has 5 red and 3 green marbles. Other has 4 red and 2 green marbles. What is the Probability of drawing a red marble?

$\Rightarrow$ $\boxed{5R \; 3G}$ $\boxed{4R \; 2G}$

1st Pot OR 2nd Pot

$$\frac{1}{2} \times \frac{5}{8} + \frac{1}{2} \times \frac{4}{6}$$

$$= \frac{5}{16} + \frac{1}{3} = \frac{15+16}{48} = \frac{31}{48}$$

~~Another way~~

5) In a set of 30 game cards, 17 are white and rest are green. 4 white and 5 green are marked IMPORTANT. If a card is chosen randomly what is the Probability of chosing green card or an IMPORTANT card

$\Rightarrow$ white = 17 cards

$\therefore$ green = 30 − 17 = 13 cards

$$\frac{13}{30} + \frac{9}{30} - \frac{5}{30} = \frac{17}{30}$$

6) A box has 6 black, 4 red, 2 white and 3 blue shirts. Find the Probability of drawing 2 black shirts if they are picked randomly?

$$\Rightarrow \frac{{}^6C_2}{{}^{15}C_2} = \frac{15}{105} = \frac{1}{7}$$

Explain

Explain

1st B & 2nd B

$\frac{6}{15} \times 5$

7) A box has 6 black, 4 red 2 white and 3 blue shirts. what is the probability of picking at least 1 red shirt in 4 shirts, that are randomly picked?

⇒

not chosing a red shirt = $\frac{{}^{11}C_4}{{}^{15}C_4}$

$= \frac{{}^{11}C_7}{{}^{15}C_{11}} = \frac{\frac{11\times10\times9\times8}{4\times3\times2\times1}}{\frac{15\times14\times13\times12}{4\times3\times2\times1}}$

$= \frac{330}{1365}$

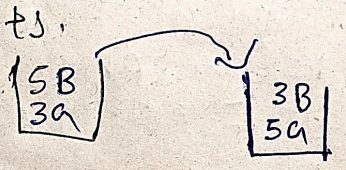
∴ at least 1 red shirt = $1 - \frac{330}{1365}$

$= \frac{1035}{1365}$

$= \frac{69}{91}$

8) A box has 5 black and 3 green shirts. one shirt is picked randomly and put it in another box. The second box has 3 black and 5 green shirts. Now a shirts picked from second box. what is the probability of it being a black shirts.

⇒



Black = $\frac{5}{8}$ & 1 Black = $\frac{4}{9} = \frac{5}{8}\times\frac{4}{9} = \frac{20}{72}$

OR → +

Green = $\frac{3}{8}$ & 1 Black = $\frac{3}{9} = \frac{3}{8}\times\frac{3}{9} = \frac{9}{72}$

∴ Probability = $\frac{20}{72} + \frac{9}{72} = \frac{29}{72}$

Q) If 5 coins are tossed simultaneously find the probability of getting atleast 2 heads.

⇒ 2H or 3H or 4H or 5H

$$5C_2 + 5C_3 + 5C_4 + 5C_5$$

$$10 + 10 + 5 + 1 = 26$$

$\therefore$ Probability $= \frac{26}{2^5} = \frac{26}{32}$

---

coins

	1c	2c	3c	4c	5c
1H/1T	1	2	3	4	5
2H/2T		1	3	6	10
3H/3T			1	4	10
4H/4T				1	5
5H/5T					1

Dice sum

Sum →	2	3	4	5	6	7
outcomes (less 1)	1	2	3	4	5	6

Sum →	8	9	10	11	12
outcome →	5	4	3	2	1

13 − Sum

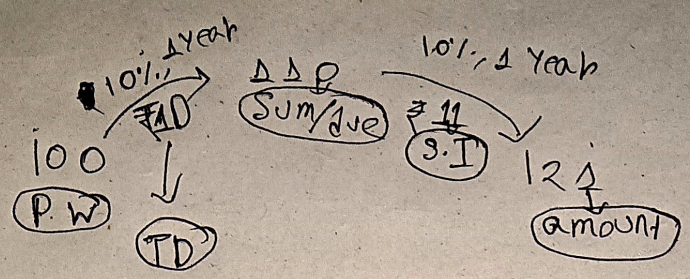
Q) When two dice are thrown simultaneously then find the probability that sum of dice is a multiple of 4.

⇒ Sum → 4, 8, 12

$$3 + 5 + 1 = 9$$

$\therefore$ Probability $= \frac{9}{6^2} = \frac{9}{36}$

TRUE DISCOUNT



Formula:

1) SI − TD = interest on TD

2) P.W + TD = Sum

3) $P.W = \frac{100 \times \text{sum(amount)}}{100 + (R \times T)} = \frac{100 \times T.D}{R \times T}$

4) $TD = \frac{P.W \times R \times T}{100} = \frac{\text{Sum(amount)} \times R \times T}{100 + (R \times T)}$

Note: In given question amount means sum/due

My Thieks:-

In simple interest formula -

I = TD

P = P.W

R = r%

T = t years

A = Sum/due/amount

5) $\text{Sum} = \frac{SI \times TD}{SI - TD}$

Q) The true discount on a certain sum of money due 3 years hence is Rs. 300 and the simple interest on the same sum for the same time at same Rate is Rs. 450. Find Sum an Rate Percent

⇒ Given, TD = 300, SI = 450

T = 3 years

$\therefore \text{Sum} = \frac{450 \times 300}{150}$

= 900

Now, P.W = 900 − 300 = 600

⇒ I = TD = 300

P = 600, T = 3 years

R = ?

$\therefore R = \frac{I \times 100}{P \times T}$

$= \frac{300 \times 100}{600 \times 3}$

2) The difference between SI and TD on a certain sum for 6 month at $12\frac{1}{2}$% per annum is RS. 20. Find the sum.

⇒ SI - TD = Interest on TD = 20

$\therefore 20 = \frac{x \times \frac{25}{2} \times \frac{1}{2}}{100} \Rightarrow \frac{25x}{4} = 2000$

$\Rightarrow 25x = 2000 \times 4$

$\Rightarrow x = 80 \times 4$

$= 320$

$\therefore SI = 320 + 20 = 340$

$\therefore \text{sum} = \frac{SI \times TD}{SI - TD} = \frac{320 \times 340}{20} = 5440$

3) If the TD on a sum due 2 years hence at 12% per annum be RS. 156, the sum due is -

⇒ TD = I = 156, T = 2 years, R = 12%.

$\therefore P.W = \frac{156 \times 100}{12 \times 2} = 650$

$\therefore \text{sum} = P.W + TD = 650 + 156 = 806$

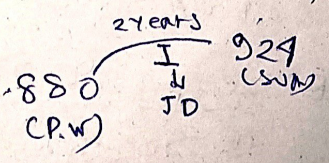
4) The TD on RS. 1620 due after a certain time at 12% per annum is Rs. 120. The time after which it is due is -

⇒ sum = A = 1620, R = 12%, TD = I = 120

$\therefore P.W = A - I = 1620 - 120 = 1500$

$\therefore T = \frac{120 \times 100}{1500 \times 12} = \frac{2}{3}$ years $= \frac{2}{3} \times 12 = 8$ month

(*) 5) The interest on RS. 880 for 2 years is the same as the true discount on RS. 924 due 2 years. If the rate of interest is same in both case, it is -



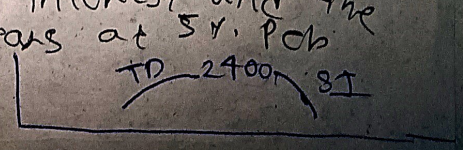
⇒ P.W = 880, sum = A = 924

$\therefore I = 924 - 880 = 44$

R = ?, T = 2 years

$\therefore R = \frac{44 \times 100}{880 \times 2} = 2.5\%$

6) The difference between simple interest and the true discount on RS. 2400 due 4 years at 5% per annum simple interest is ____



⇒ Sum = 2400, t = 4 years, r = 5%.

$\therefore TD = \frac{2400 \times 5 \times 4}{100 + 20} = 400$ | $SI = \frac{2400 \times 5 \times 4}{100} = 480$

$\therefore SI - TD = 480 - 400 = 80$

Banker's Discount

1) B.D = SI on bill for unexpired time

2) BG = BD − TD = SI on TD = $\frac{(TD)^2}{PW}$

3) TD = $\sqrt{P.W \times BG}$

4) Amount = $\frac{B.D \times T.D}{B.D - TD}$

5) TD = $\frac{BG \times 100}{R \times T}$

Q.1) The true discount on a bill of ₹540 is ₹90. The banker's discount is ___

⇒ ~~TD = 540~~ TD = 90, Amount = 540

∴ P.W = 540 − 90 = 450

∴ In 450 → 90 st

1 → $\frac{90}{450}$ "

540 → $\frac{90}{450} \times 540$ = 108 rupees

2) The present worth of a certain bill due sometime hence is ₹800 and the true discount is ₹36. The banker's discount ___

⇒ TD = 36, P.W = 800

Now, BG = $\frac{(TD)^2}{PW}$ = $\frac{36 \times 36}{800}$ = 1.62

∴ BD = 1.62 + 36

= 37.62

3) The banker's gain on a certain sum due 2 years hence at 10% per annum is ₹24. The present worth is ___

⇒ BG = 24, T = 2 years, R = 10%.

P.W = ?

TD = $\frac{BG \times 100}{R \times T}$ = $\frac{24 \times 100}{10 \times 2}$ = 120

∴ BG = $\frac{(TD)^2}{PW}$ = $\frac{120 \times 120}{PW}$

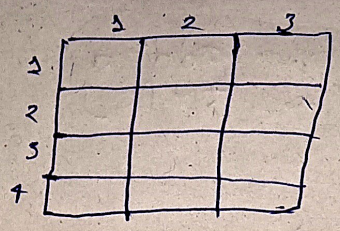
⇒ P.W. = $\frac{120 \times 120}{24}$ = 600

Counting · Figure

Counting square

Type 1: row ≠ column

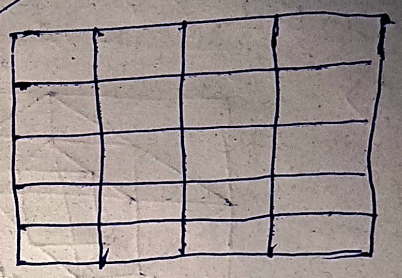
Q.1)



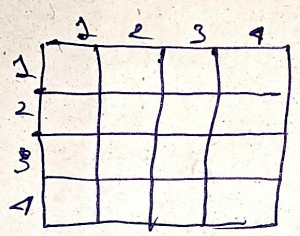
∴ $r = 4$
$c = 3$

$4 \times 3 = 12$
$3 \times 2 = 6$
$2 \times 1 = 2$
$1 \times 0 = 0$
20

Q.2)



Type 2: row = column

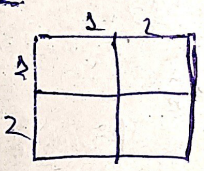


∴ $1^2 + 2^2 + 3^2 + 4^2 = 30$

Solve by Type 1

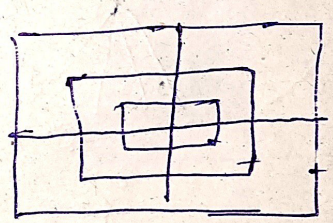
$4 \times 4 = 16$
$3 \times 3 = 9$
$2 \times 2 = 4$
$1 \times 1 = 1$
$0 \times 0 = 0$
30

Type 3: when only + in the square, count = 5



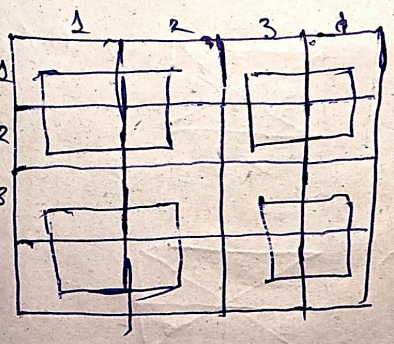
∴ $1^2 + 2^2 = 5$

Q.1)



$5 \times 3 = 15$

Q.2)

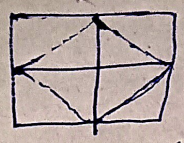


Outside square → $4^2 + 3^2 + 2^2 + 1^2$
$= 30$

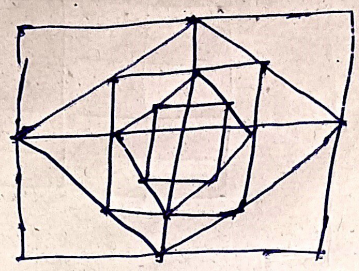
Inside 4 square with + only $= 5 \times 4 = 20$

∴ Total $30 + 20 = 50$

Type 4:-



5+1=6 (----"design square added with the previous type)

Q) 

no of square = ? (17)

- outside (+ square) one 1 Rombus = 6
- 2nd inside square same as outside = 6
- Inner square only + design = 5

∴ Total = 6+6+5 = 17

Counting of Thiangle :-

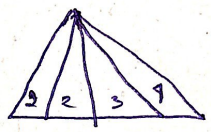
Type 1:

∴ 1+2 = 3

or

$\frac{2+3}{2}$

= 3



= 10

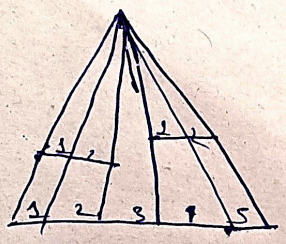
or

$\frac{4+5}{2}$ =

→ $\frac{n(n+1)}{2}$

or

Total of single divided Thiangle

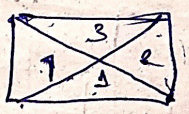
Q.1) 

$\frac{5\times6}{2}$ = 15

$\frac{2+3}{2}$ = 2

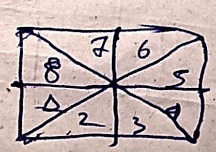
$\frac{2+3}{2}$ = 2

19

Q.2) 

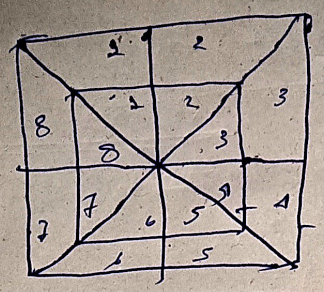
→ n+2

∴ 4+2 = 8

Q.3) 

∴ 8+2 = 16

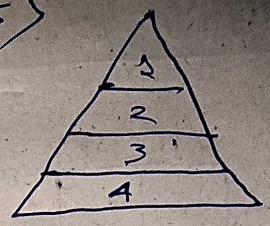
Q.4)



- outside = 8+2 = 16
- Inside = 8+2 = 16

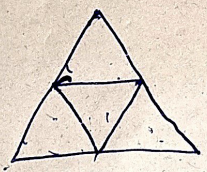
32

Q.5)



∴ Ans = 4

Q.6)



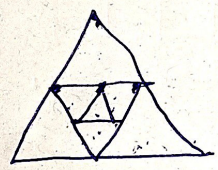
- outside = 2
- inside = 1+2 = 3

5

By thick = 4+1 = 5

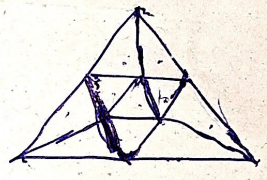
Thick:- If triangle inside triangle with touching mid point
↓
count = 4 + 1 (outside)

Q.7)



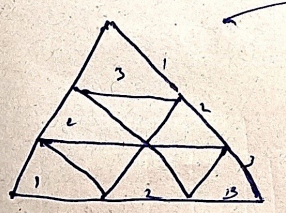
⇒ 4+4+1 = 9

Q.8)



- Same as the Q.7 = 9
- Now for adding 1 line we got 2 triangle
  ∴ 3+2 = 6
  ∴ Total = 9+6 = 15

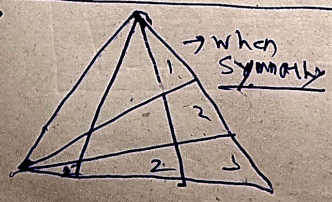
Q.8)



∴ n = 3

No	Δ
1 →	1
2 →	5
3 →	13
4 →	27
5 →	48
6 →	78
7 →	118
8 →	170

Q.9)

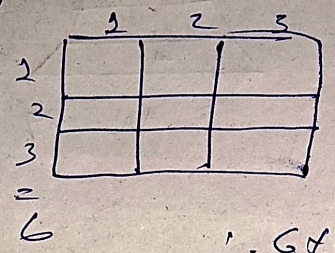


→ when symmetry

∴ $(3)^3 = 27$

Counting of Rectangle:-

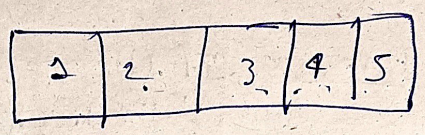
Type 1:



$1+2+3=6$

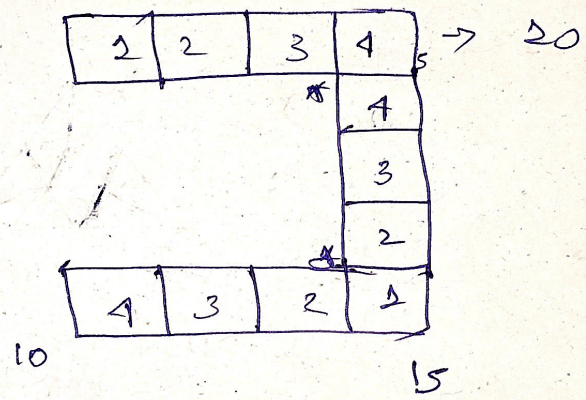
$\therefore 6 \times 6 = 36$

Type 2:



$1+2+3+4+5 = 15$

Type 3: same as Type 2 but Join



$\therefore 10+10+15 - 2$ (Join)

$= 33$

Counting of straight line

Rule:-

1. First count Horizontal line
2. Then vertical line
3. The slope line

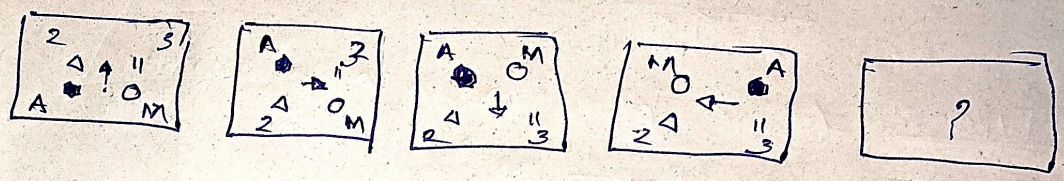
Embeded Figure

We have given a part of drawing, we have to find this part taken from which picture.

(Note) Read the question cahefully. because you have to notice Rotation is allow or not

Completion of Figure

Q)



Option:-

a)

(a) (b) (c) (d)

~~Analogy Test~~

classification Test

Q) Find the odd one

a) MONITOR

b) PRINTER

c) MOUSE

d) WINDOWS

clock

Type 1:- Mirror image

Trick: Subtract the time from 11:60 (vice-versa also same process)

Q) 3:15 is seen in the image of the clock in the mirror what be the right time?

⇒ 11:60
3:15
8:45

Type 2: Angle b/w hour hand and minute hand

formula – $\left(30H - \frac{11}{2}M\right)$

Tricks:-

- Hour hand per hour create 30° angle

↳ 12 hr → 360°

$\boxed{1 \text{ hr} \rightarrow 30^\circ}$

But when minute hand move, hour hand move by 0.5° for minute

- For minute hand per minute 6° angle

60 min → 360°

$\boxed{1 \text{ min} \rightarrow 6^\circ}$

Q) Angle between hour and minute at 8:30 pm.

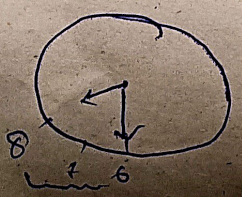
⇒ $30 \times 8 - \frac{11}{2} \times 30 = 240 - 165$
$= 75^\circ$

- 8 hr = $8 \times 30 + 0.5 \times 30$
$= 240 + 15$
$= 255$

30 min = $30 \times 6 = 180$

∴ Angle = $255 - 180 = 75^\circ$

Tricks:-

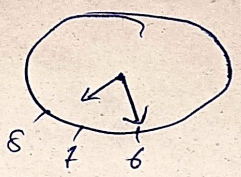


- Difference of hour – minute
= 8 – 6 = 2

Thicks: ① Find the diff b/w hour and minute
② calculate angle for that hour (by ×30)
③ And add / subtract (half of minute) withe the hour angle

add → when hour hand ahead
Subtract → when " " behind

Solve:- 8:30



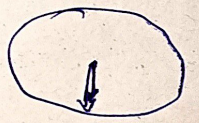
∴ Difference = 8−6 = 2 = 2×30 = 60°
Now 30/2 = 15 → add ∴
∴ 60+15 = 75°

Q) 4:30 pm, 3:15 PM → solve

Type 3/4: coincide / opposite

Q) At what time between 6 and 7 o'clock will be the hands of clock coinside?

⇒ $6 : \frac{12}{11} \times M$



$= 6 : \frac{12}{11} \times 30$

$= 6 : \frac{360}{11}$

$= 6 : 32\frac{8}{11}$

Thicks → option in the fraction add upper value + full value = 0 last digit

Here $32\frac{8}{11}$, ∴ 32+8 = 40 ✓ right option

Q) 9 and 10 o'clock opposite direction

⇒ $9 : \frac{12}{11} \times 15$

$= 9 : \frac{180}{11}$

$= 9 : 16\frac{4}{11}$

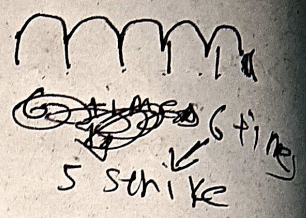
Thicks: a) 9:15
b) 9:16
c) $9 : 16\frac{4}{11}$ ✓
d) 9 [illegible]

Type II Strike

Q) A clock takes 33 seconds to strike 12 times, and how long will it take to strike 6 times.

=) 11 time → 33 sec

1 → 3 sec



5 strike = 5 × 3 = 15 sec

5 strike = 5 × 3 = 15 sec

SYLLOGISMA

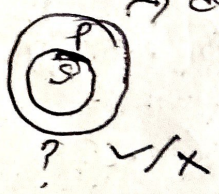
* We verify the conclusion based on the statement.
  i) If all the statement is positive the conclusion never be negative.
* A conclusion never be same as statement
* Use Ven Diagram for better visualization and understanding

(a) All S are P

Conn: ① some P are S
② some S are P

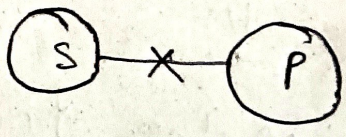
(b) some S are P

Conn: some P are S



→ don'e use it

(c) No S are P



Conn: ① Some S are not P
② No P are S.

(d) Some S are Not P

Conclusion from two statement:-

Step: ① Find the two term in the statement. You will find a common term b/w the two statement. It can be cross or vertical. If you not found any common term then you cannot drawn any conclusion

② Now use this rule -

All + All = All
All + No = No
All + Some = No conclusion

Some + All = Some
Some + No = Some Not
Some + Some = No conclusion

No + All = Some Not (Reversed)
No + Some = Some Not (Reversed)
No + No = conclusion

Some Not + Anything = No conclusion

③ Now if in conclusion there is possibility term then think once again.-

a) All A are B

↳ Some B are Not A is a posibility

b) Some B are Not A

↳ All A are B is a Posibility

c) Some ⇒ All
Some A are B

↳ All B are A is a Possibility
↳ All A are B is a Possibility

d) No conclusion = Any Possibility is true

e) All ⟺ Some Not (Reversed)
Ex:- See 'a' example, 'b' example

Another way

Statement have subject, copula, Predicate

Ex:- All A are B

A ↓ subject, are ↓ copula, B ↓ Predicate

* Statement also called Proposition or Premises

→ Now Proposition is 2 type

- Categorical Proposition
  - → All S are P
  - → Some S are P
  - → No S is P
- Non categorical Proposition
  - → Either S or P
  - → If P then S

⊛ We do only categorical Proposition

▨ Immediate Inference —conclusion draw from→ Single Statement

Mediate Inference —"→ Two Statement

▨ Types of categorical Proposition:-

1. A → Universal affirmative → All S are P
2. E → Universal negative → No S is P
3. I → Particular affirmative → Some S are P
4. O → Particular negative → Some S are not P

Method for Immediate Inference (Single statement)

a. Implication → subject and predicate remain same

only $A \to I$, $E \to O$ } 2 case follow

$I \to A$, when possibility used

Ex:- ① All S are P (A)
↳ Some S are P (I)

② No S is P (E)
↳ Some S are not P (O)

③ Some S are P (I)
↳ All S are P is (possibility) (A)

b. conversion → subject and predicate will be reversed.

only
$A \to I$
$E \to E$
$I \to I$
$O \to X$ (not changed

Possibility case –

$A \to O$
$O \to A$
$I \to A$ } possibility

Method for Mediate Inference (Two Statement)

Step:- ① Find the Aligning (~~First statment~~ common term is the Phedicate of first statement and subject of the second Statement)

② Follow the rule for conclusion categorical type

A + A = A

A + E = E

I + A = I

I + E = O

E + A = O* → Subject and Phedicate are in reversed

E + I = O*

No conclusion when —

1. A + I, A + O
2. I + I, I + O
3. E + E, E + O

} Any possibility true

* If two statement have no common term then no conclusion could be drawn

---

Mind it

* You have 2 statement and 2 Conclusion. After checking you found no conclusion. That does not means conclusion I and II are wrong. They may be true. So chose option Either I or II