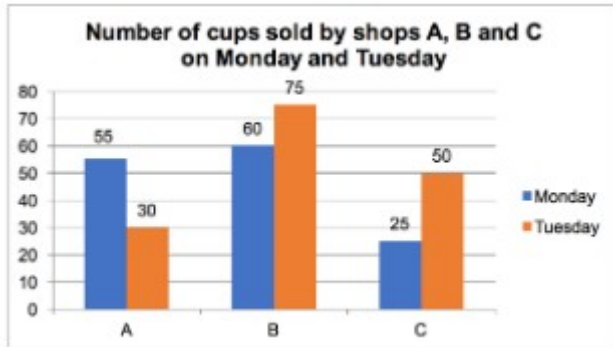


The chart below shows the number of cups sold by three different shops on A ,B,C on Monday , Tuesday , Wednesday



what is the average number of cups sold by shop A and shop C on Tuesday?

**sol:**

$$(30+50)/2=40$$

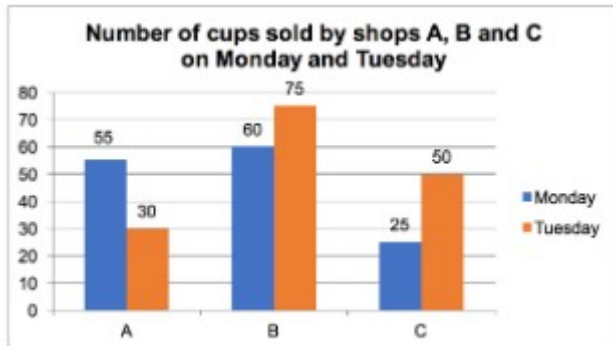
(a) 20

(c) 60

(b) 30

**(d) 40**

The chart below shows the number of cups sold by three different shops on A ,B,C on Monday , Tuesday , Wednesday



Number of cups sold by shop B on Tuesday is what percentage more than the number of cups sold by same shop on Monday?

**sol:**

$$(75-60)/60*100$$

$$15/60*100$$

**25%**

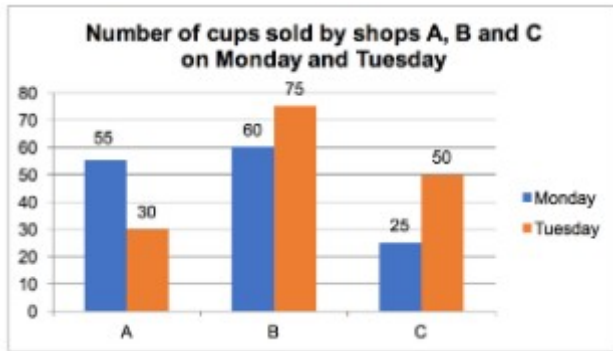
(a) 35%

**(c) 25%**

(b) 50%

(d) 60%

The chart below shows the number of cups sold by three different shops on A ,B,C on Monday , Tuesday , Wednesday



How many cups sold on Monday by all the three shops together ?

**sol:**

$$55+60+25$$

**140**

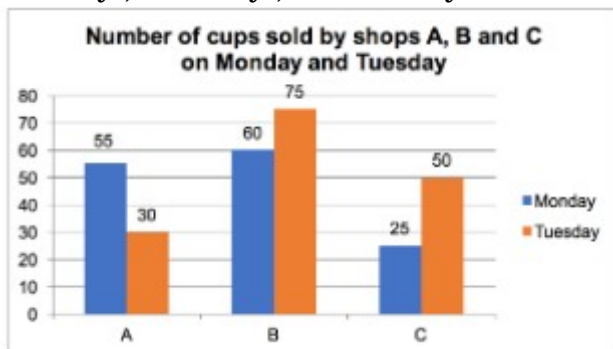
(a) 120

(c) 130

(b) 150

**(d) 140**

The chart below shows the number of cups sold by three different shops on A ,B,C on Monday , Tuesday , Wednesday



If number of cups sold by shop A on Wednesday was 20% more than that sold on Monday , how many cups were sold by shop A on Wednesday ?

**sol:**

**A on Wednesday =20% more than on Monday**

$$55+11=66$$

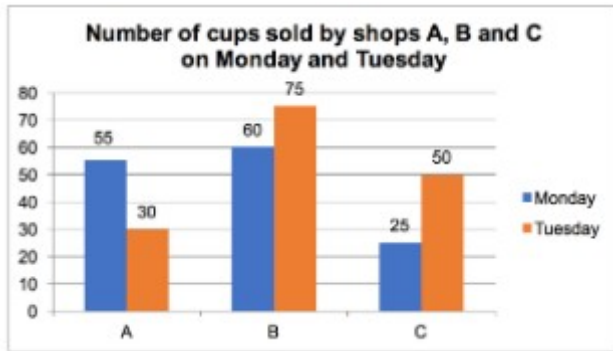
(a) 55

**(c) 66**

(b) 44

(d) 33

The chart below shows the number of cups sold by three different shops on A ,B,C on Monday , Tuesday , Wednesday



what is the difference between number of cups sold by shop A and shop C on Tuesday together and B and C on Monday together?

**sol:**

**80-85**

**5**

(a) 4

(c) 2

**(b) 5**

(d) 6

What is the angle between minute hand and hour hand at 2.25?

**sol:**

**$30^\circ + 30^\circ + 35\text{min}$**

**$30^\circ + 30^\circ + 17.5^\circ$**

**$77.5^\circ$**

(a)  $66.5^\circ$

(c)  $86.5^\circ$

(b)  $76.5^\circ$

**(d)  $77.5^\circ$**

What is the angle between minute hand and hour hand at 11.45?

**sol:**

**$30^\circ + 30^\circ + 45\text{min}$**

**$82.5^\circ$**

(a)  $66.5^\circ$

**(c)  $82.5^\circ$**

(b)  $51.5^\circ$

(d)  $88.5^\circ$

At what time between 9 o'clock and 10 o'clock, will the hands of a clock be together?

**sol:**

**$55=60$**

**$45=x$**

**$x=(45*60)/55$**

**$49 \frac{1}{11}$  past 9**

(a)  **$49 \frac{1}{11}$  past 9**

(c)  $22 \frac{1}{11}$  past 10

(b)  $30 \frac{1}{11}$  past 9

(d)  $10 \frac{1}{11}$  past 12

At what time between 3 o'clock and 4 o'clock the hands of the clock be in opposite direction

**sol:**

**$55=60$**

**$45=x$**

$$x = (60 \times 450) / 55$$

**49 1/11 part 3**

- (a) 20 1/11 part 4  
(b) **49 1/11 part 3**

- (c) 10 1/11 part 5  
(d) 12 1/11 part 6

How many degree does a 5 minute space have in it ?

- (a)  $60^\circ$   
(b)  $50^\circ$   
(c)  **$30^\circ$**   
(d)  $40^\circ$

What was the day of week on 29<sup>th</sup> April 1875?

**sol:**

**$1600 + 200 + 74 + (\text{month upto march} + \text{april 28 days})$**

**$0 + 3 + 36 + 56 + 6$**

**$0 + 3 + 1 + 0 + 6$**

**10**

**3rd day = Wednesday**

- (a) **Wednesday**  
(b) Tuesday  
(c) Thursday  
(d) Friday

If 20<sup>th</sup> may 1990 is Friday then what was the day on 10<sup>th</sup> june 1995 ?

**sol:**

**$20 \text{ th may } 1990 - \text{Friday} + 1 + 1 + 2 + 1 + 1 \rightarrow \text{Friday} + 6 = 20 \text{ th may } 1995 = \text{Thursday}$**

**$10 \text{ th june } 1995 = 20 \text{ th may } + 4 + 3$**

**$= \text{Thursday} + 7 \rightarrow \text{Thursday}$**

- (a) Wednesday  
(b) Tuesday  
(c) **Thursday**  
(d) Friday

Today is Sunday , find the day after 79 days?

**sol:**

**odd days = 2 days**

**so Sunday + 2 days = Tuesday**

- (a) Sunday  
(b) Thursday  
(c) **Tuesday**  
(d) Friday

11<sup>th</sup> January 1997 was a Sunday . What day of the week lies on 7<sup>th</sup> jan 2000?

**sol:**

**$11 \text{ th may } 1997 - \text{sunday} + 1 + 1 + 1 \rightarrow \text{Wednesday} - 4 = 7 \text{ th jan } 2000 = \text{Saturday}$**

- (a) **Saturday**  
(b) Monday  
(c) Wednesday  
(d) Sunday

Prem's birthday is on 23<sup>rd</sup> oct 2003 , Kathir born 5 days ahead of Prem , on which day does Kathir born?

**sol:**

**$23^{\text{rd}} \text{ oct } 2003 = 2000 + 2 + (2) \rightarrow 4 = 4^{\text{th}} \text{ day} = \text{Thursday}$**

5 days ahead of Thursday is  
Tuesday

(a) Wednesday

(c) Thursday

**(b) Tuesday**

(d) Friday

Find the missing number

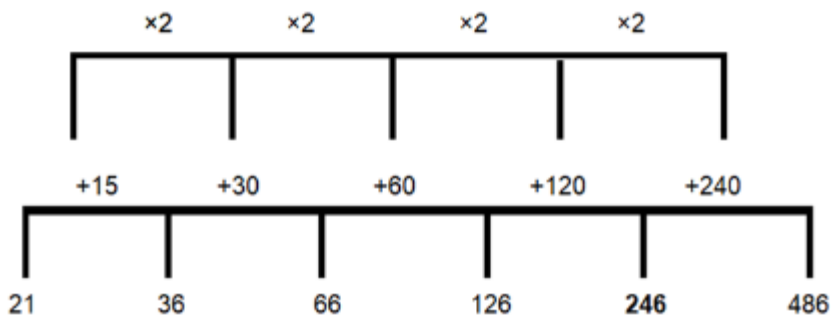
21, 36, 66, 126, ---, 486

Ans:

**246**

Sol:

The given series follows the following pattern:



(a) 314

**(c) 246**

(b) 266

(d) 276

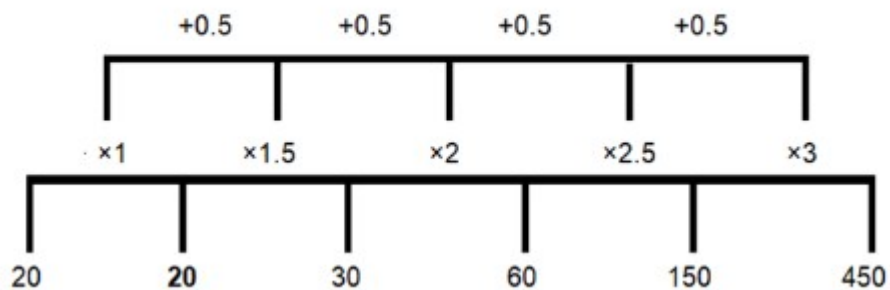
20, ---, 30, 60, 150, 450

Ans:

**20**

Sol:

The given series follows the following pattern:



(a) 15

(c) 25

**(b) 20**

(d) 40

15, 26, 39, 56, ---, 98

Ans:

75

Sol:

$$15 + 11 = 26$$

$$26 + 13 = 39$$

$$39 + 17 = 56$$

$$56 + 19 = 75$$

$$75 + 23 = 98$$

(a) 85

(b) 65

520, 519, 511, ---, 420, 295

**Ans:**

**484**

**sol:**

$$520 - 1^3 = 519$$

$$519 - 2^3 = 511$$

$$511 - 3^3 = 484$$

$$484 - 4^3 = 420$$

$$420 - 5^3 = 295$$

(a) 474

**(b) 484**

4, 8, 24, ---, 480, 2880

**Ans:**

**96**

**sol:**

The given series follows the following pattern:

$$4 \times 2 = 8$$

$$8 \times 3 = 24$$

$$24 \times 4 = 96$$

$$96 \times 5 = 480$$

$$480 \times 6 = 2880$$

(a) 86

**(c) 75**

(d) 95

(c) 464

(d) 454

(c) 76

(b) 106

(d)96

Find the simple interest for the sum of Rs 70000 at the rate of 30% per annum for 48 months

Ans: 84000

Sol:

$R=28\%$  for three years  $28 \times 3(36 \text{ months})=84 \%$

$100\%=70000$

$120\%=84000$

(a) 45789

(c) 20500

(b) 45874

(d)84000

Tamil borrowed Rs 110000 from his friend Dharma at 8% simple interest per annum and due to his financial situation he gives back his amount after 10 years, so find the total amount settled by Tamil to Dharma at the end of 10 years

Ans:

198000

Sol:

$R=8\%$  for 10 years  $80\%$

so

$100\%=110000$

$180\%=198000$

(a) 184792

(c) 198000

(b) 120145

(d)40000

A certain sum of money amounts to Rs 4235 in three years when invested at 18% pa simple interest, find the principle ?

Ans:

2750

$R=18\% \times 3=54\%$

$154\%=4235$

$100\%=2750$

(a) 3750

(c) 2450

(b) 2750

(d)3130

Dravid invested Rs 7000 for 2 years in a scheme offering simple interest of 16% pa and he invested same sum in another scheme offering 20% simple interest pa for 2 years, find the difference in interest

Ans:

560

Sol:

$32\%-40\%=8\%$

$100\%=7000$

$8\%=560$

(a)460

(c) 90

(b) 560

(d)240

The simple interest received, after 6 years on investing Rs 24000 at the rate of 25% is invested in a bank that offers 30% pa, then find the total amount received from the bank after 5 years

Ans:90000

Sol:

$$100\% = 24000$$

$$150\% = 36000 \text{ (SI at 25\% for 6 yrs)}$$

$$100\% = 36000$$

$$250\% = 90000 \text{ (total amount at 30\% for 5 years)}$$

$$(a) 80000$$

$$(c) 90000$$

$$(b) 50000$$

$$(d) 60000$$

Find the interest received for the sum of Rs 50000 invested at 10% pa for 2 years compounded annually

$$\text{Ans: } 10500$$

Sol:

$$10 + 10 + (10 \times 10) / 100 = 21\%$$

$$100\% = 50000$$

$$21\% = 10500$$

$$(a) 14200$$

$$(c) 10500$$

$$(b) 15200$$

$$(d) 11200$$

Jeevitha received a total amount of Rs 84500 from a bank which he invested 2 years ago at the rate of 30% pa compounded annually, find the principle amount he invested in the bank?

Ans;

$$50000$$

Sol:

$$30\% \text{ for 2 yrs is } 69\%$$

$$169\% = 84500$$

$$100\% = 50000$$

$$(a) 60000$$

$$(c) 40000$$

$$(b) 50000$$

$$(d) 30000$$

Nagalakshmi invested Rs 20000 each in two schemes, first scheme offers 20% pa simple interest for 2 years and second scheme offers 30% compound interest per annum for 2 years, find the difference in interest she received.

$$\text{Ans: } 5800$$

$$SI = 40\% (2 \text{ yrs})$$

$$CI = 69\% (2 \text{ yrs})$$

$$\text{Diff} = 29\%$$

$$100\% = 20000$$

$$29\% = 5800$$

$$(a) 4800$$

$$(c) 6800$$

$$(b) 3800$$

$$(d) 5800$$

Rs P amounts to Rs 3927 in two years if it is invested in a scheme which offers compound interest (compounded annually) of 5% pa and 10% pa in first year and second year respectively, Find the value of P

Ans:

$$3400$$

Sol:

$$\text{interest for two years is } 15.5\%$$

$$115.5\% = 3927$$



100 % = 3400

(a) 2500

(c) 6500

(b) 8100

(d) 3400

10000 for 2 years at compound interest of 10%pa , compounded annually is equal to the total amount received on investing Rs Y for 1 year at simple interest of 25% pa .Find the value of Y

Ans:

9680

Sol:

CI:

10000 = 100%

12100 = 121% (21% CI for 2 years )

SI

12100 = 125%

9680 = 100%

(a) 9680

(c) 8687

(b) 9784

(d) 10254

**Statements:**

All Rule are Method

A few Method are Trick

Only Trick are Useful

**Conclusions:**

I. No Useful are Rule

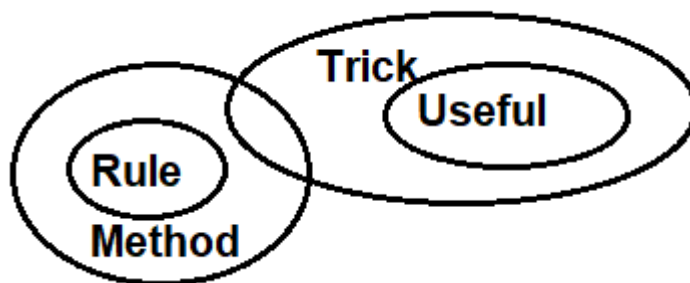
II. Some Trick are Rule

III. Some Method are not Useful

Ans:

(b) both i and iii follows

Sol:



(a) only i follows

**(b) both i and iii follows**

**Statements:**

All winter is season

A few season is rain

No cloud is winter

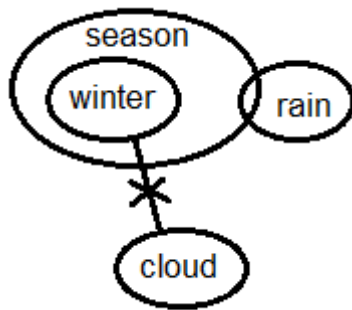
**Conclusions:**

I. No season is cloud

II. Some winter is rain

Ans:

**(d) Neither i nor ii follows**



(a) only i follows

(b) both i and ii follows

**Statements:**

Some five is one

All one is four

No three is one

**Conclusions:**

I. All five is four

II. All three being four is a possibility

Ans:

**(c) only ii follows**

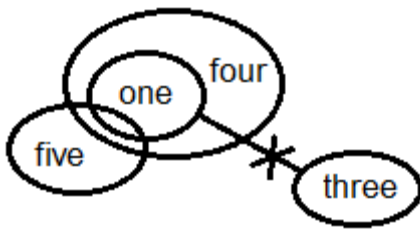
(c) only ii follows

(d) Neither i nor ii follows

(c) only ii follows

**(d) Neither i nor ii follows**

**Sol:**



(a) only i follows

(b) both i and ii follows

**(c) only ii follows**

(d) Neither i nor ii follows

**Statements:**

All trial are viral.

Only few rule are trial.

Some kind are rule.

**Conclusions:**

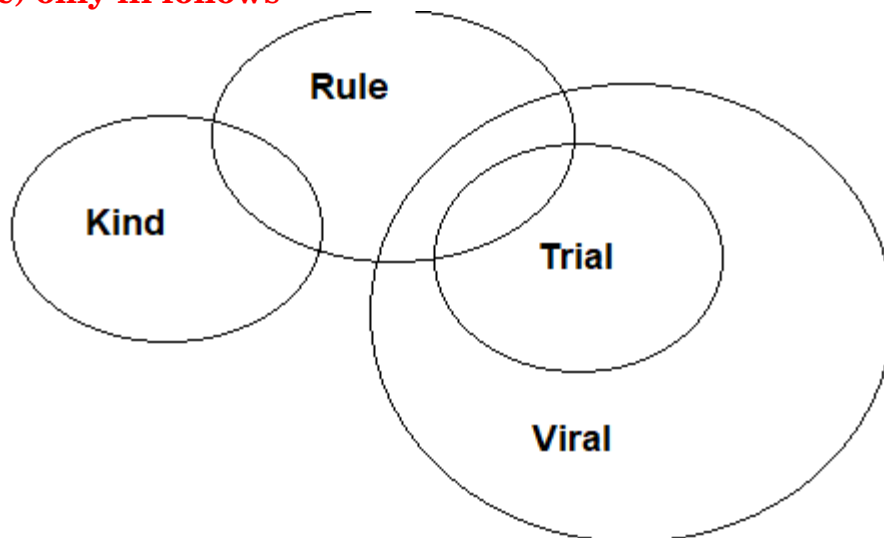
I. All rule are viral.

II. No kind is viral.

III. Some viral are trial.

Ans:

**(c) only iii follows**



(a) only i follows

(b) both i and ii follows

**(c) only iii follows**

(d) Neither i nor ii follows

Statements:

Only A are B.

Some A and C.

All C are D.

### Conclusions:

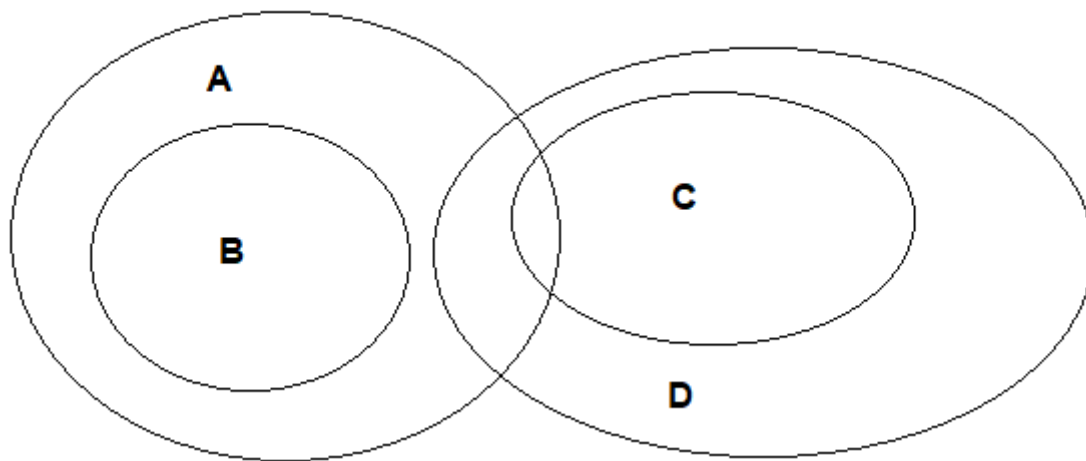
I. All A are D.

II. No B is C.

III. Some B are D.

Ans:

**only ii follows**



(a) only i follows

(b) both i and ii follows

**(c) only ii follows**

(d) Neither i nor ii follows

**Statements:**

Only a few students are teachers.

All teachers are principals.

No persons are teachers.

**Conclusions:**

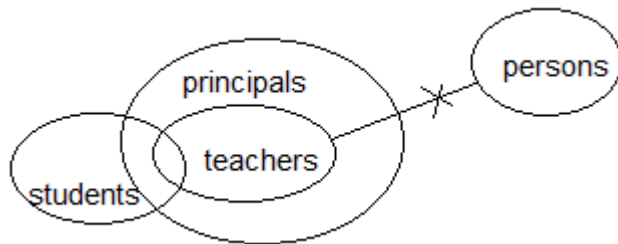
I. All persons being principals is a possibility.

II. All students may be teachers.

Ans:

**(a) only i follows**

**Sol:**



**(a) only i follows**

(b) both i and ii follows

(c) only ii follows

(d) Neither i nor ii follows

**Statements:**

Only buckets are bottles.

No pots are brushes.

Some brushes are buckets.

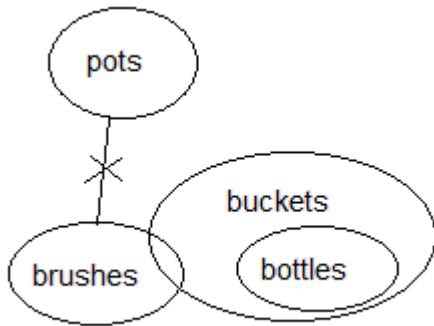
**Conclusions:**

I. No pots are buckets.

II. A few brushes being bottles is a possibility.

Ans: **(d) Neither i nor ii follows**

**Sol:**



(a) only i follows

Line graph shows the number of winter wears ( sweaters and jackets)sold by A,B,C,D

(c) only ii follows

**(d) Neither i nor ii follows**



values are :

SWEATERS

A =124 B=152 C =176 D=80

JACKETS

A =146 B =72 C= 98 D=128

Find the difference between the winter wears sold by shop A and shop C

**sol:**

$$(124+146)-(176+98)=274-270$$

$$=4$$

(a) 3

**(b) 4**

Line graph shows the number of winter wears ( sweaters and jackets)sold by A,B,C,D

(c) 2

(d)1



values are :

SWEATERS

A =124 B=152 C =176 D=80

JACKETS

A =146 B =72 C= 98 D=128

Find the average number of sweaters sold ?

**sol:**

$$(124+152+176+80)/4=532=133$$

(a) 123

(c) 113

(b) 143

**(d)133**

Line graph shows the number of winter wears  
( sweaters and jackets)sold by A,B,C,D



values are :

SWEATERS

A =124 B=152 C =176 D=80

JACKETS

A =146 B =72 C= 98 D=128

The number of jackets sold by shop D is  
what percent of num of jackets sold by  
shop B and C combined ?

**sol:**

$$128/(72+98)*100$$

$$128/170*100$$

**75.3%**

(a) 65.3%

(b) 81.7%

(c) 62.3%

**(d) 75.3%**

Line graph shows the number of winter wears  
( sweaters and jackets)sold by A,B,C,D



values are :

SWEATERS

A =124 B=152 C =176 D=80

JACKETS

A =146 B =72 C= 98 D=128

find the ratio of number of winter wears sold by  
shop B to that of shop D

**sol:**

$$224:208 ; 14:13$$

(a) 13:15

(b) 17:11

**(c) 14:13**

(d) 11:12

Line graph shows the number of winter wears  
( sweaters and jackets)sold by A,B,C,D





values are :

SWEATERS

A =124 B=152 C =176 D=80

JACKETS

A =146 B =72 C= 98 D=128

The number of shawls sold by shop E is  $\frac{3}{8}$ <sup>th</sup> of number of sweaters sold by shop B. Find the number of shawls sold by shop E.

**sol:**

$$\frac{3}{8} \times 152 = 57$$

(a) 67

**(b) 57**

(c) 77

(d) 45

What was the day of week on 5<sup>th</sup> october 1983 ?

**sol:**

$$1600 + 300 + 82 + (\text{months upto sep} + 5^{\text{th}} \text{ oct})$$

$$0 + 1 + 40 + 62 + 5$$

$$3$$

**3<sup>rd</sup> day = wednesday**

(a) Tuesday

**(b) Thursday**

What was the day of week on 14<sup>th</sup> may 1675?

**sol:**

$$1600 + 74 + (\text{month upto april} + \text{may 14 days})$$

$$0 + 36 + 56 + 8$$

$$0 + 1 + 0 + 1$$

2

2<sup>nd</sup> day=Tuesday

(a) Wednesday

**(b) Tuesday**

If 20<sup>th</sup> may 1990 is Friday then what was the day on 10<sup>th</sup> june 1995 ?

sol:

20<sup>th</sup> may 1990 – Friday

+1+1+2+1+1 → Friday+6=20<sup>th</sup> may

1995=Thursday

10<sup>th</sup> june 1995 = 20<sup>th</sup> may +4 +3

=Thursday + 7 → Thursday

(a) Wednesday

(b) Tuesday

Today is Friday , find the day after 68 days?

sol:

odd days =5 days

so Friday+5 days = Wednesday

(a) Tuesday

(b) Thursday

11<sup>th</sup> January 1997 was a Sunday . What day of the week lies on 7<sup>th</sup> jan 2000?

sol:

11<sup>th</sup> may 1997 – sunday +1+1+1 → Wednesday-4=7

7<sup>th</sup> jan 2000=Saturday

**(a) Saturday**

(b) Monday

Naveen's birthday is on 23<sup>rd</sup> oct 2003 , Shyam born 5 days ahead of Naveen , on which day does Shyam born?

sol:

23<sup>rd</sup> oct 2003 =2000+2+(2) → 4=4<sup>th</sup> day

=Thursday

5 days ahead of Thursday is

Tuesday

(a) Wednesday

**(b) Tuesday**

Find the wrong number

256, 64, 32, 4, 1, 0.25

Ans:

32

sol:

$$1024/4=256$$

$$256/4=64$$

$$64/4=16$$

(a) 32

(b) 4

Find the missing number

28, 44, 108, 252, ?, 908

Ans:

508

sol:

$$28+4^2=44$$

$$44+8^2=108$$

$$108+12^2=252$$

$$252+16^2=508$$

(a) 508

(b) 504

Find the missing number

475, 446, 477, 440, ?

Ans:

481

sol:

$$475-29=446$$

$$446+31=477$$

$$477-37=440$$

$$440+41=481$$

(a) 480

(b) 483

(i) 2, 8, 20, 38, 62, X

(ii) 5, 15, 30, 50, 75, Y

What is X+Y?

Ans:

197

Sol:

$$x=92$$

$$y=105 \quad x+y=197$$

(a) 187

(b) 207

**Statement:**

Only a few Percussion is Drum.

All Drum is Instrument

No Instrument is Guitar.

**Conclusion:**

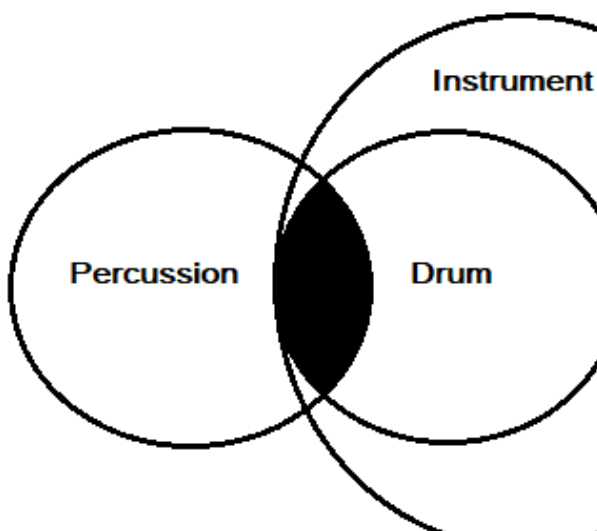
I. No Drum is Guitar.

II. Some Percussion is Instrument.

Ans:

(b) both i and ii follows

Sol:



(a) only i follows

(b) both i and ii follows

**Statements:**

Only king is queen

Some king is not prince

**Conclusions:**

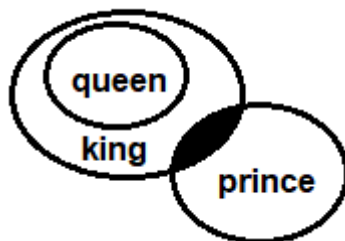
I. Some queen can never be prince is a

II. All king can be prince

Ans:

**(d) Neither i nor ii follows**

**Sol:**



(a) only i follows

(b) both i and ii follows

**Statements:**

All Ball are Bat

No Bat are Racket

No Racket are Stumps

**Conclusions:**

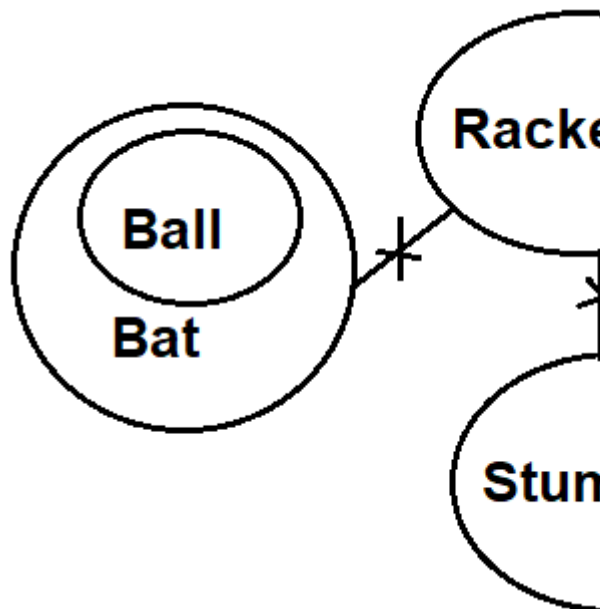
I. At least Some Stumps are Bat

II. Some Ball are Racket is a possibility

Ans:

**(d) Neither i nor ii follows**

**Sol:**



(a) only i follows

(b) both i and ii follows

**Statements:**

Some Cricket are Hockey

Some Hockey are Football

All Football are Tennis

**Conclusions:**

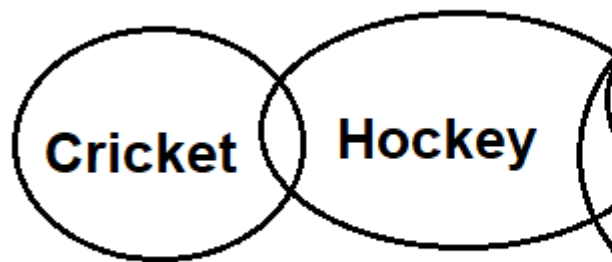
I. At least Some Hockey are Cricket

II. At least Some Tennis are Hockey

Ans:

**(b) both i and ii follows**

**Sol:**



(a) only i follows

**(b) both i and ii follows**

**Statements:**

Mostly hour is minute

Only a few minute is dial

**Conclusions:**

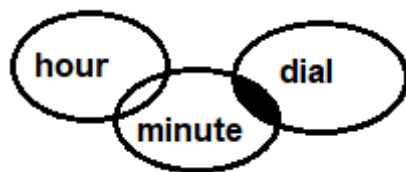
I. Some hour is not dial

II. Some minute is not dial

**Ans:**

**(c) only ii follows**

**Sol:**



(a) only i follows

(b) both i and ii follows

**Statements:**

99% Verbs are Letters

No Letters are Word

No Word are Digit

**Conclusions:**

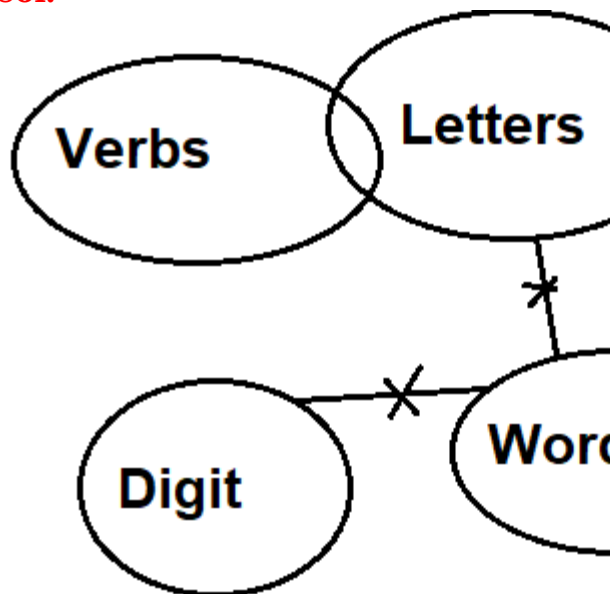
I. Some Digit are Verbs is a possibility

II. Some Verbs are not Word

Ans:

**(b) both i and ii follows**

**Sol:**



(a) only i follows

**(b) both i and ii follows**

Seven persons ( Sina, Siya, Sinu, Sanu, Shyam, Siri, and Sita) sit around a circular table facing towards centre but not necessarily in same order.

Sanu sits 2<sup>nd</sup> to the left of Siya. Shyam sit 2<sup>nd</sup> to the right of Siri. Shyam doesn't sit adjacent to Siya. Two persons sit between Sinu and Sina. Sina doesn't sit adjacent to



Sanu. Two persons sit between Siya and Sita

Eight persons (Arti, Aarya, Babloo, Chaman, Diya, Diksha, Era and Farhan ) sit around a circular table facing towards centre but not necessarily in the same order. The person who has the same initials do not sit adjacent to each other.

Two persons sit between Aarya and Babloo. Two persons sit between Babloo and Chaman. Arti sits adjacent to Chaman. Diksha doesn't sit adjacent to Babloo. Farhan sits 2<sup>nd</sup> to the left of Diksha. Neither Era nor Diya sits 2<sup>nd</sup> to the right of Chaman

