

The two sets of observations are given below

set 1	mean=82.5	S.D.= 7.3
set 2	mean=48.75	S.D.= 8.35

which of two is more consistent?

- both set are less consistant
- both set are more consistant
- set 2 is more consistent
- set 1 is more consistent

[Clear selection](#)

Coefficient of variance is given by the formula...

$$\frac{\sigma}{\bar{x}} \times 100$$

Option 2

$$\bar{x} - \sigma$$

Option 1

$$\frac{\bar{x}}{\sigma}$$

Option 4

Option 3

Evaluate  $\sin[\theta + \frac{\pi}{6}] - \sin[\theta - \frac{\pi}{6}] = \dots$

tan $\theta$

cos $\theta$

Option 3

Option 2

cot $\theta$

sin $\theta$

$$\text{Evaluate } \frac{\sin 3A - \sin A}{\cos 3A + \cos A} = .$$

- cosa
- sina
- tana
- cota

[Clear selection](#)

If  $\tan\left[\frac{A}{2}\right] = \frac{1}{\sqrt{3}}$  then value of cosec A becomes.

$$\frac{2}{\sqrt{3}}$$

$$-\sqrt{3}$$

Option 4

Option 1

$$\sqrt{3}$$

$$\frac{-2}{\sqrt{3}}$$

Standard deviation for raw data is given by the formula

Option 4

$$(d_i)^2$$

Option 3

$$\sqrt{\frac{\sum(d_i)^2}{N}}$$

Option 1

$$\sqrt{\frac{(d_i)^2}{d}}$$

Option 2

$$\sqrt{\frac{(d_i)^2}{N}}$$

**Calculate the area of a rhombus whose diagonals are 30 and 16 cm.**

- 250 sq.cm
- 240 sq.cm
- 200sq.cm
- 150 sq.cm

**Find mean deviation of the data. 1,2,3,4,5**

- 1.4
- 1.5
- 1.3
- 1.2

**Clear selection**

If the volume of a room is 792 cubic meter and the area of the floor is 132 square meter. Find the height of the room.

- 4 meter
- 6 meter
- 7 meter
- 5 meter



[Clear selection](#)

Find x if  $\sin^{-1} \left[ \frac{2}{3} \right] = \tan^{-1} x$

Option 4

$$\frac{\sqrt{5}}{3}$$

Option 3

$$\sqrt{5}$$

Option 2

$$\frac{2}{\sqrt{5}}$$

Option 1

$$-\frac{2}{\sqrt{5}}$$

Evaluate  $\tan^{-1}\left(\frac{1}{2}\right) + \tan^{-1}\left(\frac{1}{3}\right) = \dots$

Option 1

$$\pi$$

Option 2

$$-\frac{\pi}{4}$$

Option 3

$$\frac{\pi}{4}$$

Option 4

$$\frac{\pi}{2}$$

The side of a cube is 60 cm. Find the total surface area of the cube.

- 21500 sq.cm
- 21600 sq.cm
- 22600 sq.cm
- 20100 sq.cm

[Clear selection](#)

Coefficient of variation of distribution is 75% and standard deviation is 24, what is its mean.

- 33
- 30
- 31
- 32

The height and slant height of a cone are 12cm and 20 cm respectively . Find its volume.

- 3500.30 cubic cm
- 3218.36 cubic cm
- 4000 cubic cm
- 3000 cubic cm

[Clear selection](#)

Evaluate  $\frac{\sin\theta}{1+\cos\theta} = \underline{\hspace{2cm}}$

Option 1

$$-\tan\left[\frac{\theta}{2}\right]$$

Option 4

$$-\cot\left[\frac{\theta}{2}\right]$$

Option 3

$$\cot\left[\frac{\theta}{2}\right]$$

Option 2

$$\tan\left[\frac{\theta}{2}\right]$$

Calculate the range and coefficient of range of the following given data.

class intervals	40 -59	60-79	80-99	100- 119	120-139
Frequency	50	300	500	200	60

- range=100 and coefficient of range=0.559
- range=90 and coefficient of range =0.699
- range=80 and coefficient of range= 0.0599
- range = 70 and coefficient of range = 0.899

[Clear selection](#)

Find range and coefficient of range of the following data.

49,63,46,59,65,52,60,54.

- R = 18 and C.R. = 0.18
- R = 20 and C.R. = 0.18
- R = 19 and C.R. = 0.17

**Find volume of a hemisphere having radius 2meter.**

- 16.76 cubic meter
- 17 cubic meter
- 16 meter cube
- 20 cubic meter

[Clear selection](#)

**Find the capacity of a cylindrical water tank whose radius is 2.1 m and height is 5m.**

- 78000 litre
- 60783 litre
- 58000 litre
- 69300 litre

[Clear selection](#)

If  $2 \sin 60^\circ \cos 20^\circ = \sin A + \sin B$  then value of A and B is..

A=40° and B = -80°

A=40° and B = 40°

Option 3

Option 1

A=40° and B = 80°

A=80° and B = 40°

**Evaluate**

$$\frac{\tan 66 + \tan 69}{1 - [\tan 66 \cdot \tan 69]}$$

-1

1

0

2

**Clear selection**

Tangential form of  $\cos 2\theta$  is..

$$\frac{\tan^2 \theta + 1}{1 - \tan^2 \theta}$$

Option 4

$$\frac{\tan^2 \theta}{1 + \tan^2 \theta}$$

Option 1

$$\frac{1 - \tan^2 \theta}{1 + \tan^2 \theta}$$

Option 2

$$\frac{\tan^2 \theta}{1 - \tan^2 \theta}$$

Option 3

[Clear selection](#)



Principal value of  $\cos\left\{\frac{\pi}{2} - \sin^{-1}\left[\frac{1}{2}\right]\right\}$

- 1/3
- 3/2
- 1/2
- 1/2

[Clear selection](#)

Evaluate

$$\sqrt{2 + 2\cos\theta}$$

$$2\cos\left[\frac{\theta}{2}\right]$$

$$2\tan\left[\frac{\theta}{2}\right]$$

option 1

option 3

$$2\sin\left[\frac{\theta}{2}\right]$$

$$2\cot\left[\frac{\theta}{2}\right]$$

Option 2

Option 4

[Clear selection](#)

Find std. deviation of the data 1, 2, 3

- 0.812
- 0.782
- 0.901
- 0.70

[Clear selection](#)

If  $\tan A = 1/2$  then the value of 'SinA' if angle A lies in the 3rd quadrant is

$\frac{-1}{\sqrt{5}}$

$\sqrt{5}$

Option 2

Option 3

$\frac{1}{\sqrt{5}}$

$-\sqrt{5}$

The area of a trapezoid is 24 sq.cm and the length of parallel sides are 9 cm, and 7cm. Find the height.

- 3 cm
- 2cm
- 4cm
- 5cm

[Clear selection](#)

If  $\tan A = 1/2$ ,  $\tan B = 1/3$  then  $\tan[A+B] = \dots\dots$

- 0
- 1
- 3
- 1

[Clear selection](#)

If  $\cos A = 1/2$ , then value of  $\cos 3A$

- 0
- 2
- 1
- 1

[Clear selection](#)

Find x if  $\tan^{-1}(1) + \tan^{-1}(x) = 0$

- 1
- 0
- 2
- 1

[Clear selection](#)

