

Alamaal English High School , Sharjah

Class: 9

worksheet

Subject: Mathematics



Name: _____

Choose the best answer.

Q#1 The side of an equilateral triangle is 6cm. Choose its area?

i) $16\sqrt{3}$

ii) $9\sqrt{3}$

iii) $\frac{a^2\sqrt{3}}{2}$

Q#2 Choose the volume of cone with altitude 9cm, radius of base is 6cm

i) 343 cm^3

ii) $108\pi^2 \text{ cm}^3$

iii) 339.3 cm^3

Q#3 Distance between two points (2,1) and (4, -3) is

i) $2\sqrt{5}$

ii) $5\sqrt{2}$

iii) $2\sqrt{2}$

Q#4 To show that the points A(-2,11) , B(-6,-6) and c(4,-9) are of scalene triangle we have to show

i) $m\overline{AB} = m\overline{BC}$

ii) $m\overline{AB} = m\overline{BC} = m\overline{CA}$

iii) $m\overline{AB} \neq m\overline{BC} \neq m\overline{CA}$

Q#5 Determinant of $\begin{bmatrix} -2 & 5 \\ 3 & 4 \end{bmatrix}$ is

i) 6

ii) -6

iii) -23

Q#6 Is the matrix $\begin{bmatrix} -2 & 5 \\ 3 & 4 \end{bmatrix}$ singular or non-singular

i) Singular

ii) non-singular

Q#7 Multiplicative inverse A^{-1} of matrix A is

i) $\frac{1}{A^t} adjA$

ii) $\frac{1}{|A|} adA$

iii) $\frac{1}{adA} |A|$

Q#8 Transpose of a matrix $\begin{bmatrix} 3 & 4 \\ -1 & 4 \end{bmatrix}$ is

i) $\begin{bmatrix} 3 & -1 \\ 4 & 4 \end{bmatrix}$

ii) $\begin{bmatrix} 4 & -4 \\ -1 & 3 \end{bmatrix}$

Q#9 Find w, x, y and z such that

$$\begin{bmatrix} w & x \\ y & z \end{bmatrix} + \begin{bmatrix} 3 & 0 \\ -1 & 5 \end{bmatrix} = \begin{bmatrix} 2 & 1 \\ 6 & -3 \end{bmatrix}$$

i) $w=-1, x=1, y=7, z=-8$

ii) $w=7, x=1, y=8, z=-1$

Q#10 Points lying on the x-axis are

i) $x=a$

ii) $y=a$



