CLASS – 11th

Q (1) The shortest distance between a line and a point is achieved when?

1. A line is drawn at 90 degrees to the given line from the given point.
2. A line is drawn at 180 degrees to the given line from the given point.
3. A line is drawn at 60 degrees to the given line from the given point.
4. A line is drawn at 270 degrees to the given line from the given point.

Answer – (a)

Q (2) what is the shortest distance between the line given by $ax+by+c=0$ and the point (x1,y1)?

1. $\frac{ax1+by1+c}{\sqrt{a^{2}+b^{2}}}$ (b) $\frac{ax1+by1+c}{\sqrt{a^{2}+b^{2}}}$ (c) $\frac{ax1+by1}{\sqrt{a^{2}+b^{2}}}$ (d) $ax1+by1+c$

Answer – (a)

Q(3) What is the shortest distance between the line given by $-2x+3y+4=0$ and the point (5,6)?

1. 4.5 units
2. 5.4 units
3. 4.3units
4. 3.3units

Answer – (d)

Q(4) What is the distance between the lines $3x+4y+7=0$ and $3x-4y+5=0$?

1. 1 unit
2. 0.5 unit
3. 0.8 unit
4. 0.4 unit

Answer – (d)

 Q (5) Find the distance between $2x+y+4=0$ and $2x+y+8=0$

1. $\frac{4}{\sqrt{5}}$ (b) $\frac{3}{\sqrt{5}}$ (c) $\frac{9}{\sqrt{5}}$ (d) $\frac{3}{\sqrt{2}}$

Answer – (a)

Q (6) The distance between of the point of intersection of the lines $2x=3y+5=0$ and $3x+y=0$ from the line $5x-2y=0$ is

1. $^{130}/\_{\sqrt[17]{29}}$ (b) $^{13}/\_{\sqrt[7]{29}}$ (c) $^{130}/\_{17}$ (d) none of these

Answer – (a)

Q (7) The distance between the parallel lines $3x-4y+7=0$ and $3x-4y+5=0$ is

1. $ ^{3}/\_{7}$ (b) $^{7}/\_{5}$ (c) $^{2}/\_{5}$ (d) $^{3}/\_{5}$

Answer – (c)

Q (8) The distance between the lines $3x+4y=9$ and $6x+8y=15$ is

1. $^{3}/\_{10}$ (b) $^{2}/\_{25}$ (c) $^{7}/\_{10}$ (d) $^{3}/\_{5}$

Answer – (c)

Q (9) If the length of the perpendicular from the origin to the line $3x+2y=6$ is m. what is the value of m?

1. $^{13}/\_{36}$ (b) $^{1}/\_{3}$ (c) $^{6}/\_{\sqrt{13}}$ (d) $\frac{\sqrt{13}}{36}$

Answer – (c)

Q (10) What is the distance of the point (3,3) from the line $2\left(x-3\right)=3(y+5)$?

1. $^{5}/\_{3}$ (b) 6 (c) $^{24}/\_{\sqrt{13}}$ (d) $^{4}/\_{\sqrt{13}}$

Answer – (c)

Q (11) What is the distance between the parallel lines $3\left(x+y\right)+2=0$ and $6x+6y+28=0$?

1. $\sqrt[2]{2}$ (b) 4 (c) 2 (d) $\sqrt[3]{2}$

Answer – (a)

Q (12) Considering a fixed distance from the origin, how many points can be plotted on the y axis?

1. 2 (b) 3 (c) 4 (d) no points

Answer – (a)

Q (13) The slope of a line and its y intercept is 2. What is the distance of such a line from the point (1,2)?

1. 4 (b) $^{7}/\_{10}$ (c) $^{7}/\_{\sqrt{10}}$ (d) $\frac{2}{\sqrt{3}}$

Answer – (b)

Q (14) Find the perpendicular distance of the line $3y=4x+5$ from (2,1)

1. 1 (b) 2 (c) 3 (d) 4

Answer – (b)

Q (15) The distance of a point (3,2) from a line $3x+4y=7$ is-

1. $\frac{2}{\sqrt{5}}$ units (b) 2 units (c) 5 units (d) $\sqrt{5}$ units

Answer – (b)

 Range Statistics

Q (1) Range of the data 4,7,8,9,10,12,13 and 17 is-

1. 4 (b) 17 (c) 13 (d) 21

Answer – (c)

Q (2) Calculate the range of the given sets of the data 7,47,8,42,47,95,42,96,2

1. 6 (b) 94 (c) 71 (d) 84

Answer – (b)

Q (3) Find the range of the following data sets 61,22,34,17,81,99,42,94

1. 81 (b) 82 (c)83 (d) 84

Answer – (b)

Q (4) Range of a data is calculated as-

(a) Range= Max value- Min value (b) Range= Max value+ Min value

(c) Range= (Max value-Min value)/2 (d) Range= (Max value+ Min value)/2

Answer- (a)

Q (5) Range of data 7,8,2,1,3,13,18 is?

1. 15 (b) 17 (c) 13 (d) 10

Answer – (b)

Q (6) Find the range of the following data = 59,46,30,23,27,40,52,35,29

1. 36 (b) 32 (c) 34 (d) none of these

Answer – (a)

Q (7) What is the range of the following data? 23,45,34,21,89,45,47,91

1. 70 (b) 56 (c) 71 (d)69

Answer – (a)

Q (8) Find the range of the given observations: 32,41,28,54,35,26,23,33,38,40

1. 30 (b) 31 (c) 32 (d) none of these

Answer – (b)

Q (9) Following are the marks of students in mathematics: 50,53,50,51,48,93,90,92,91,90. Find the range of the marks-

1. 45 (b) 46 (c) 47 (d) 49

Answer – (a)

Q (10) Find the range of the following data- 3,6,9,12,15,90

1. 80 (b) 87 (c) 86 (d) none of these

Answer – (b)

Q (11) The range of data 21,6,17,18,19,8,4,13 is:-

1. 17 (b) 12 (c) 8 (d) 15

Answer – (a)

Q (12) If the mean of first n natural numbers is 5n19, then n=

1. 5 (b) 4 (c) 9 (d)10

Answer – (c)

Q (13) If r is the correlution coefficient then-

1. $1r1\leq 1$ (b) $r\leq 1$ (c) $1r1\geq 1$ (d) $r\geq 1$

Answer – (a)

Q (14) Range of the data 4,7,8,9,10,12,13 and 17 is-

1. 4 (b) 17 (c) 13 (d) 21

Answer – (c)

Q (15) If the varience of the data is 121 then the standard deviation of the data is –

1. 121 (b) 11 (c) 12 (d) 21

Answer – (b)