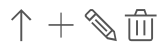


ⓘ Students have either already taken or started taking this quiz, so take care when editing it. If you change any quiz questions in a significant way, you might want to consider re-grading students' quizzes who took the old version of the quiz.

Points 100  **Published****Details****Questions**☐ Show question details

## Group 1

Group Name

Pick 4 questions, 5 pts per question Pick  questions,  pts per question

Cancel

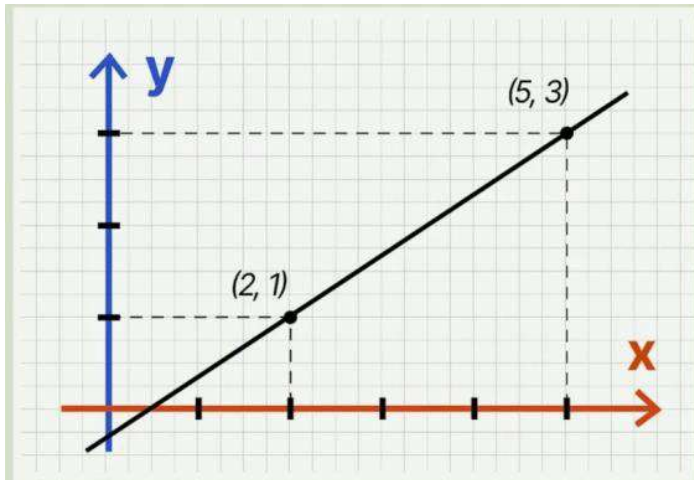
Update



Question 1 pts



Find the slope of the following straight line:

☐  $2/3$ ☐ 1☐  $3/2$ ☐  $1/3$ 

Question 1 pts



The eccentricity of a ellipse is:

- ☐  $e < 1$
- ☐  $e = 1$
- ☐  $e > 1$
- ☐  $e = 0$



Question 1 pts



X

The eccentricity of a hyperbola is:

- ☐  $e > 1$
- ☐  $e < 1$
- ☐  $e = 0$
- ☐ none of the given

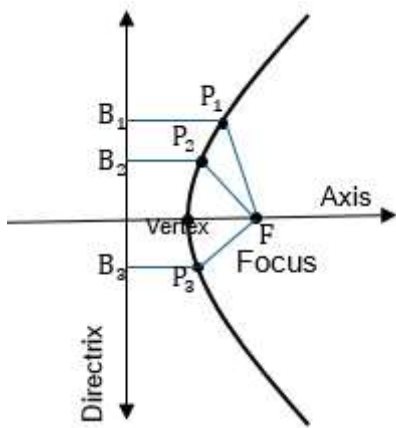


Question 1 pts



X

From the following figure which of the expressions is true?



- ☐  $P_1F = P_1B_1$
- ☐  $P_1F > P_1B_1$
- ☐  $P_1F < P_1B_1$
- ☐ None of the given



Question 1 pts



X

Angle between two lines is given by:

a)  $\tan\theta = \left| \frac{m_1 - m_2}{1 + m_1 m_2} \right|$     b)  $\tan\theta = \left| \frac{m_1 + m_2}{1 + m_1 m_2} \right|$     c)  $\tan\theta = \left| \frac{m_1 - m_2}{1 - m_1 m_2} \right|$     d)  $\tan\theta = \left| \frac{m_1 - m_2}{1 + m_2} \right|$

☐ a

☐ b

☐ c

☐ d



Question 1 pts



Find the distance between two points: (1, 2) and (1, 5)

☐ 3

☐ 5

☐ 4

☐ 2



Question 1 pts



Distance between two parallel lines  $ax+by+c_1=0$  and  $ax+by+c_2=0$  is given by:

a)  $d = \frac{|c_1 - c_2|}{\sqrt{a^2 + b^2}}$     b)  $d = \frac{|c_1 + c_2|}{\sqrt{a^2 + b^2}}$     c)  $d = \frac{|c_1 - c_2|}{\sqrt{a^2 - b^2}}$     d)  $d = \frac{|c_1 - c_2|}{\sqrt{a + b}}$

☐ a

☐ b

☐ c

☐ d



Question 1 pts



Find the radius and center of a circle:  $x^2 + y^2 = 64$

☐ (h,k)= (0, 0), r= 8

☐ (h, k) = (0, 0) , r= 64

- ☐  $(h, k) = (1, 1), r = 64$
- ☐ None of the above

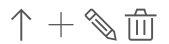


## Group 2

Group Name

Pick 6 questions, 10 pts per question Pick  questions,  pts per

question



Cancel

Update



Question 1 pts



Find the distance between the parallel lines  $3x - 4y + 7 = 0$  and  $3x - 4y + 5 = 0$ .

- ☐  $2/5$
- ☐  $-2/5$
- ☐  $3/5$
- ☐  $4/5$



Question 1 pts



The roots of the quadratic equation  $x^2 - 2x = 15$  are:

- ☐ 5, -3
- ☐ 3, 5
- ☐ -5, 3
- ☐ 5, 3



Question 1 pts



Equation of a parabola that opens towards the left side is:

a)  $(y-k)^2 = 4a(x-h)$

b)  $(x-h)^2 = -4a(y-k)$

c)  $(y-k)^2 = -4a(x-h)$

d)  $(x-h)^2 = 4a(y-k)$

☐ c

☐ a

☐ b

☐ d



Question 1 pts



The radius and center of a circle:  $x^2 + y^2 - 4x - 8y - 45 = 0$  is:

☐ (h,k) = (2,4),  $r = \sqrt{65}$

☐ (h,k) = (4,2),  $r = \sqrt{65}$

☐ (h,k) = (4,2),  $r = 65$

☐ (h,k) = (2,4),  $r = 65$



Question 1 pts



Find the equation of ellipse whose focus is (0,8) and eccentricity  $2/3$ .

☐ d)  $9x^2 + 5y^2 = 720$

☐ a)  $5x^2 - 9y^2 = 720$

☐ b)  $5x^2 + 9y^2 = 160$

☐ None of the above



Question 1 pts



Which of the following statements is/are correct?

a. The length of the transverse axis in the ellipse is the distance between the two vertices.

b. According to the Parallel Postulate for Euclidean space, For a given line and a point not on the line, there is exactly one parallel line that passes through the given point.

c. A point  $(r, \theta)$  in polar coordinate is related to a point  $(x, y)$  in a cartesian coordinate by  $x = r \cos \theta$  and  $y = r \sin \theta$

☐ a, b, and c all are correct

- ☐ all wrong
- ☐ a wrong, b and c are correct
- ☐ none of the given



Question 1 pts



Solve the following inequality:  $4x + 3 < 6x + 7$

- ☐  $x > -2$
- ☐  $x > -4$
- ☐  $x < 4$
- ☐  $x < -2$



Question 1 pts



The inequality  $3 > 2$  is multiplied by  $-2$  on both sides. What will be the result?

- ☐  $-6 < -4$
- ☐  $-3 > -2$
- ☐  $-3 > -2$
- ☐  $-6 > -4$



Question 1 pts



The perpendicular distance of the point  $(3, -5)$  from the line  $4y = 3x - 26$  is

- ☐  $3/5$
- ☐  $5/3$
- ☐  $4/5$
- ☐  $2/5$



## Group

Pick 1 questions, 20 pts per question Pick  questions,  pts per

question

Cancel

Update



Question 1 pts



Find the vertices, eccentricity, and foci of the following ellipse

$$\frac{x^2}{9} + \frac{y^2}{4} = 1$$

- ☐ Vertices=  $(\pm 3, 0)$ , Eccentricity=  $\sqrt{5}/3$ , Foci=  $(\pm \sqrt{5}, 0)$
- ☐ Vertices=  $(\pm 2, 0)$ , Eccentricity=  $\sqrt{5}/3$ , Foci=  $(\pm \sqrt{5}, 0)$
- ☐ Vertices=  $(\pm 3, 0)$ , Eccentricity=  $\sqrt{3}/3$ , Foci=  $(\pm \sqrt{5}, 0)$
- ☐ Vertices=  $(\pm 3, 0)$ , Eccentricity=  $\sqrt{5}/3$ , Foci=  $(\pm \sqrt{3}, 0)$



Question 1 pts



Find the foci, and eccentricity of the following hyperbola:  $3x^2 - 4y^2 = 36$

- ☐ Foci=  $(\pm \sqrt{21}, 0)$ ,  $e = \sqrt{7}/2$
- ☐ Foci=  $(\pm \sqrt{20}, 0)$ ,  $e = \sqrt{5}/2$
- ☐ Foci=  $(\pm \sqrt{21}, 0)$ ,  $e = \sqrt{5}/2$
- ☐ None of the given

+ New question+ New question group Find questions
☐ Notify users this quiz has changed
**Cancel**

Save