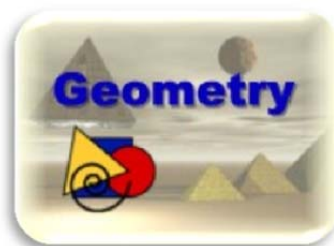
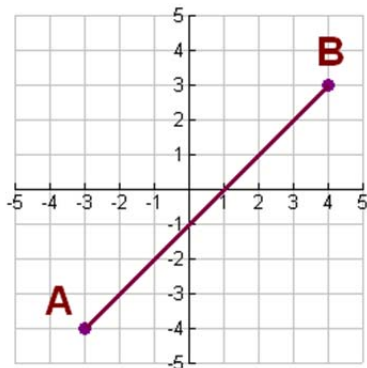


Coordinate Geometry

Name _____



- Find the midpoint of the segment joining the points (4, -2) and (-8,6).
 [1] (6, 4) [2] (-6,-4) [3] (2, 2) [4] (-2, 2)
- Find the distance between the points (3, -2) and (6,4).
 [1] $\sqrt{85}$ [2] $\sqrt{79}$ [3] $5\sqrt{3}$ [4] $3\sqrt{5}$
- What is the slope of the line passing through the points (4,6) and (-1,-2)?
 [1] $4/3$ [2] $3/4$ [3] $8/5$ [4] $5/8$
- M is the midpoint of \overline{AB} . The coordinates of A are (-2,3) and the coordinates of M are (1,0). Find the coordinates of B .
 [1] $(-1/2, 3/2)$ [2] (4,-3) [3] (-4,3) [4] (-5,6)
- The point (-4,-2) lies on a circle. What is the length of the radius of this circle if the center is located at (-8,-10)?
 [1] $\sqrt{48}$ [2] $\sqrt{80}$ [3] $\sqrt{108}$ [4] $\sqrt{288}$
- Find AB .
 [1] 1
 [2] $\sqrt{2}$
 [3] $2\sqrt{7}$
 [4] $7\sqrt{2}$



- Which point satisfies the linear quadratic system $y = x + 3$ and $y = 5 - x^2$?
 [1] (-2,1) [2] (2,1) [3] (-1,2) [4] (4,-1)
- When proving that a quadrilateral is a trapezoid, it is necessary to show
 [1] only one set of parallel sides.
 [2] one set of parallel sides and one set of non-parallel sides.
 [3] one set of parallel sides and one set of congruent sides.
 [4] two sets of parallel sides.
- Find the slope of a line perpendicular to the line whose equation is $2y + 6x = 24$.
 [1] -3 [2] 6 [3] $1/3$ [4] $-1/6$

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

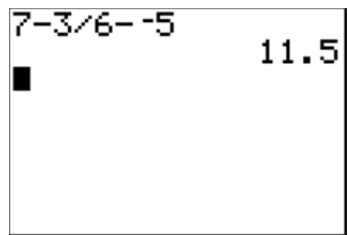
7. _____

8. _____

9. _____

10. A student enters the following information into his/her calculator when attempting to find the slope between the points (6,7) and (-5,3). Which of the following statements is TRUE?

- [1] The student is correct, the slope is 11.5.
- [2] The slope formula does not involve subtraction.
- [3] The slope is actually -11.5.
- [4] The slope is actually 4/11.



10. _____

11. Find the midpoint of the segment connecting the points (a, b) and $(5a, -7b)$.

- [1] $(3a, -3b)$
- [2] $(2a, -3b)$
- [3] $(3a, -4b)$
- [4] $(-2a, 4b)$

11. _____

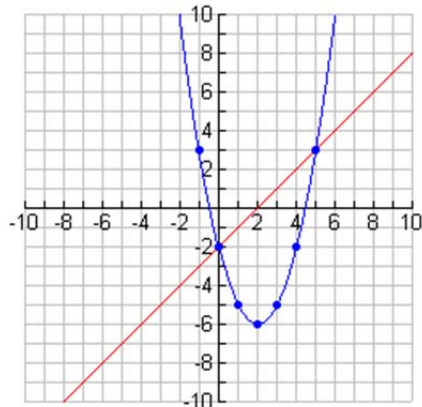
12. Find the radius of a circle whose diameter has endpoints $(-3, -2)$ and $(7, 8)$.

- [1] 5
- [2] $5\sqrt{2}$
- [3] $(2,3)$
- [4] $\sqrt{52}$

12. _____

13. From observing the graph at the right, what is(are) the solution(s) to this linear quadratic system?

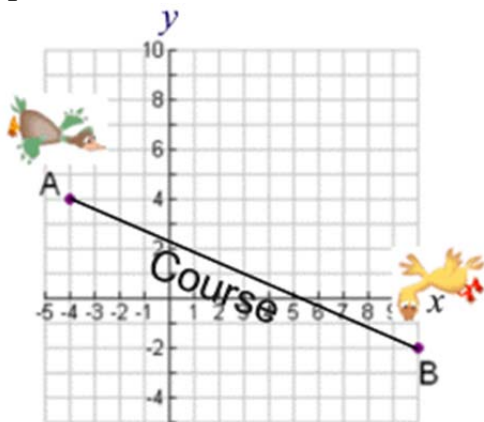
- [1] $(5,3)$
- [2] $(2,-6)$
- [3] $(5,3)$ and $(-1,3)$
- [4] $(5,3)$ and $(0,-2)$



13. _____

14. The birds shown on the graph below are flying toward one another at the same speed and same altitude on a straight line course. The birds start from points $A(-4,4)$ and $B(10,-2)$. How far will each bird fly (to the nearest mile) before they collide, if each grid on the graph represents 5 miles?

- [1] 8 miles
- [2] 10 miles
- [3] 38 miles
- [4] 40 miles



14. _____

