Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Teacher: A. Zito Lakeside Academy MYP3

**Analytical Geometry Notes**

Distance / Length

Ordered Pairs: 

Delta: means change

refers to the change in

refers to the change in

denotes distance

the distance between and

Distance between two points is the length of the line segment that joins the two points together.

Absolute Value is used to make sure that the result will always be positive. It is written using two vertical lines, one on each side of the number. When the number is positive it stays positive. When the number is negative it makes it positive.

example: and

Distance is always positive.

the absolute value of the distance

|  |
| --- |
| **Distance Formula:**  Distance formula can be used to calculate the length of line segments and find perimeters (distance / length) |

Distance Formula:



means the distance between and where as

means the distance between and

|  |
| --- |
| **Distance Formula:**  Distance formula can be used to calculate the length of line segments and find perimeters (distance / length) |

Example 1: Find the distance between and

Point 1: Point 2: 

|  |  |
| --- | --- |
|  |  |
|  |  |
|  |
|  |  |

Example 2: Find the distance between and



Point 1: Point 2:

|  |  |
| --- | --- |
|  |  |
|  |  |
|  |