**Pure 2**

**Vectors**

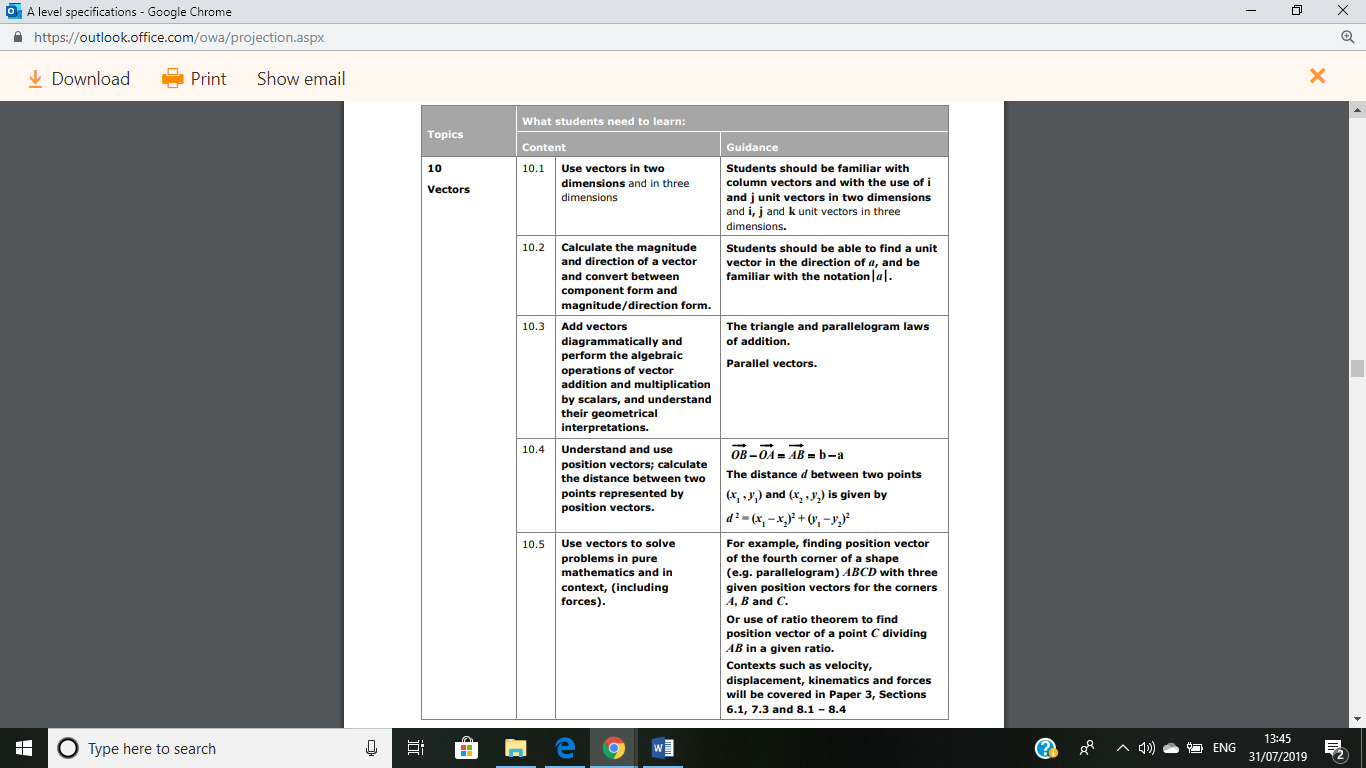
Chapter Overview

1:: Distance between two points.

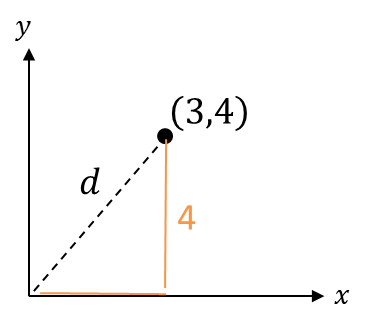
2:: notation for vectors

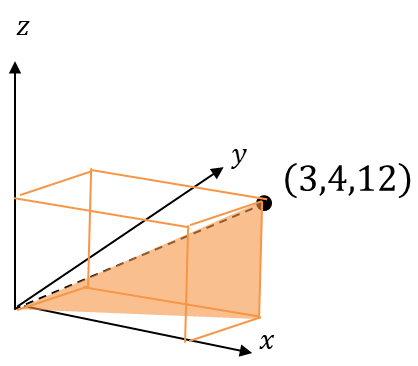
3:: Magnitude of a 3D vector and using it to find angle between vector and a coordinate axis.

4:: Solving Geometric Problems

5:: Application to Mechanics

**Distance from the origin and magnitude of a vector**

 In 2D, how did we find the distance from a point to the origin?

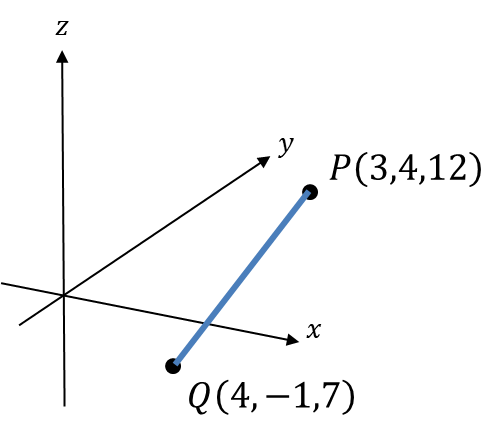




**The magnitude of a vector :**

**And the distance of from the origin is**

**Distance between two 3D points**



How do we find the distance between and ?

**The distance between two points is:**

**means “change in ”**

**Quickfire Questions:**

Distance of from the origin:

Distance between and

Distance between and

Distance between and

**Tip**: Because we’re squaring, it doesn’t matter whether the change is negative or positive.

***Test Your Understanding So Far…***

[Textbook] **Find the distance from the origin to the point .**

[Textbook] **The coordinates of and are and respectively. Given that the distance from to is units, find the possible values of .**

Ex 12A p.338