

## 12A Introduction to 3D Vectors

1. Find the distance from the origin to the point  $P(4, 2, 5)$

2. Find the distance between the points  $A(1, 3, 4)$  and  $B(8, 6, -5)$

- The coordinates of A and B are  $(5, 0, 3)$  and  $(4, 2, k)$  respectively. Given that  $|AB|$  is 3 units, find the possible values of  $k$