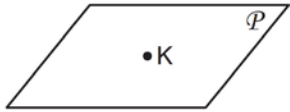


G.G.3: Planes: Know and apply that through a given point there passes one and only one line perpendicular to a given plane

- 1 In the diagram below, point K is in plane \mathcal{P} .



How many lines can be drawn through K , perpendicular to plane \mathcal{P} ?

- 1) 1
 - 2) 2
 - 3) 0
 - 4) an infinite number
- 2 Through a given point, P , on a plane, how many lines can be drawn that are perpendicular to that plane?
- 1) 1
 - 2) 2
 - 3) more than 2
 - 4) none
- 3 Point A is not contained in plane \mathcal{B} . How many lines can be drawn through point A that will be perpendicular to plane \mathcal{B} ?
- 1) one
 - 2) two
 - 3) zero
 - 4) infinite
- 4 Point A lies in plane \mathcal{B} . How many lines can be drawn perpendicular to plane \mathcal{B} through point A ?
- 1) one
 - 2) two
 - 3) zero
 - 4) infinite
- 5 Point W is located in plane \mathcal{R} . How many distinct lines passing through point W are perpendicular to plane \mathcal{R} ?
- 1) one
 - 2) two
 - 3) zero
 - 4) infinite
- 6 Point A lies on plane \mathcal{P} . How many distinct lines passing through point A are perpendicular to plane \mathcal{P} ?
- 1) 1
 - 2) 2
 - 3) 0
 - 4) infinite

G.G.3: Planes: Know and apply that through a given point there passes one and only one line perpendicular to a given plane**Answer Section**

- | | | |
|---|--------|---------------|
| 1 | ANS: 1 | REF: 061418ge |
| 2 | ANS: 1 | REF: 011024ge |
| 3 | ANS: 1 | REF: 081008ge |
| 4 | ANS: 1 | REF: 011218ge |
| 5 | ANS: 1 | REF: 011512ge |
| 6 | ANS: 1 | REF: 061514ge |