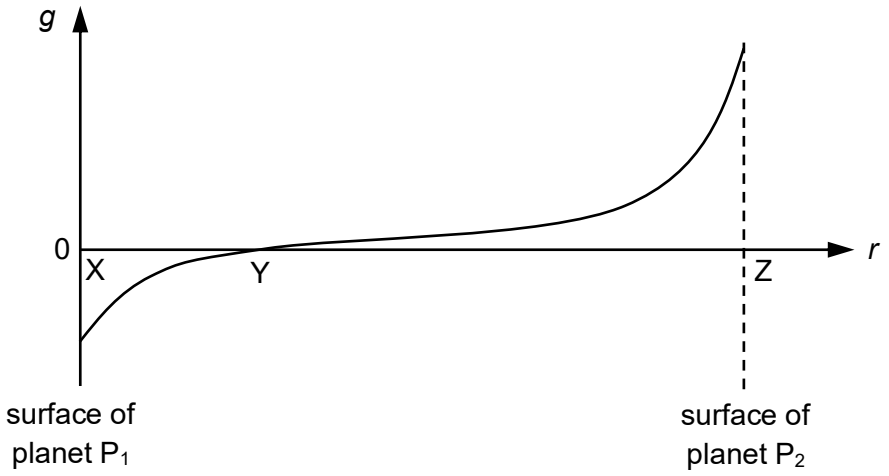
11 The graph shows the variation of the gravitational field strength *g* between the surface of planet P_1 and the surface of planet P_2 with distance *r* from the surface of planet P_1.

X, Y and Z are points along the line joining the centres of the planets.



Which statement about the gravitational potential between the two planets is correct?

A The gravitational potential at point Y is zero.

B The gravitational potential at point Z is positive.

C The area under the graph gives the value of the change in gravitational potential when a test mass is brought from point X to point Z.

D The gradient of the tangent at any point on the graph gives the value of the gravitational potential at that point.