# Prolog Project Assessment Test Cases (1 point each)

intersects(square(point2d(3,14),4), rectangle(point2d(6,11), point2d(15,8)))

true

intersects(square(point2d(3,14),4), circle(point2d(9,18),3))

false

intersects(circle(point2d(9,18),3), segment(point2d(7,21), point2d(7,15)))

true

contained(square(point2d(9,20),1), circle(point2d(9,18),3))

true

on(point2d(12,18), circle(point2d(9,18),3))

true

on(point2d(12,18), segment(point2d(7,21), point2d(7,15)))

false

parallel(segment(point2d(10,13), point2d(15,18)), segment(point2d(13,14), point2d(15,16)))

true

parallel(segment(point2d(10,13), point2d(15,18)), segment(point2d(14,15), point2d(16,13)))

false

perpendicular(segment(point2d(13,14), point2d(15,16)), segment(point2d(14,15), point2d(16,13)))

true

vertical(segment(point2d(7,21), point2d(7,15)))

true