24. The circle with centre A has radius 3 and is tangent to both the positive x-axis and positive y-axis, as shown. Also, the circle with centre B has radius 1 and is tangent to both the positive x-axis and the circle with centre A. The line L is tangent to both circles. The y-intercept of line L is

(A) $3+6\sqrt{3}$ (B) $10+3\sqrt{2}$ (C) $8\sqrt{3}$

(D) $10+2\sqrt{3}$ (E) $9+3\sqrt{3}$