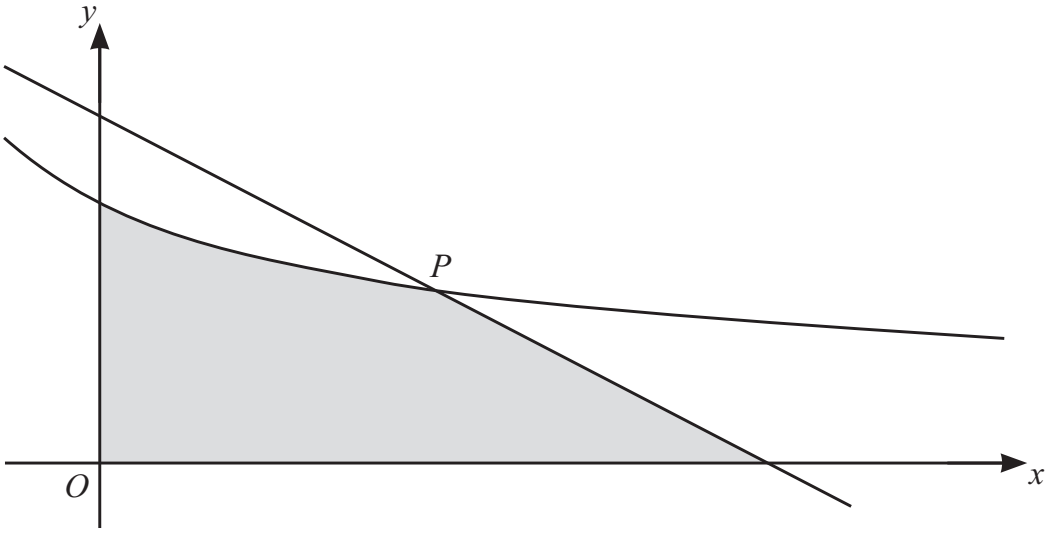
6



The diagram shows the curve with equation $y = \dfrac{9}{(5x+4)^{\frac{1}{2}}}$ and the line $y = 6 - 3x$. The line and the curve intersect at the point P which has y-coordinate 3.

Find the area of the shaded region. [6]

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