**11H Part 1 Integrating to Find Areas**



1. The diagram shows part of the curve:

$$y=\frac{9}{\sqrt{4+3x}}$$

The region $R$ is bounded by the curve, the x-axis, and the lines $x=0$ and $x=4$, and shown. Use integration to find the area of $R$.



1. The diagram shows part of the curves $y=f(x)$ and $y=g(x)$, where:

$$f\left(x\right)=sin2x$$

$$g\left(x\right)=sinxcos^{2}x$$

$$0\leq x\leq \frac{π}{2}$$

The region $R$ is bounded by the two curves. Use integration to find the area of $R$.