2014   **6**   What is the derivative of $3\sin^{-1}\dfrac{x}{2}$?   **1**

(A) $\dfrac{6}{\sqrt{4-x^2}}$ (B) $\dfrac{3}{\sqrt{4-x^2}}$ (C) $\dfrac{3}{2\sqrt{4-x^2}}$ (D) $\dfrac{3}{4\sqrt{4-x^2}}$

B

$$\frac{d}{dx}\left(3\sin^{-1}\frac{x}{2}\right) = 3 \times \frac{1}{\sqrt{4-x^2}}$$

$$= \frac{3}{\sqrt{4-x^2}}$$

State Mean:
0.75