2015 **6** What is the value of the derivative of $y = 2\sin 3x - 3\tan x$ at $x = 0$? **1**

(A) -1 (B) 0 (C) 3 (D) -9

C

$$y = 2\sin 3x - 3\tan x$$
$$y' = 6\cos 3x - 3\sec^2 x$$
$$= 6\cos 3x - \frac{3}{\cos^2 x}$$
$$y'(0) = 6\cos 3(0) - \frac{3}{\cos^2(0)}$$
$$= 6 \times 1 - \frac{3}{1}$$
$$= 3$$

State Mean: **0.72**

* These solutions have been provided by *projectmaths* and are not supplied or endorsed by BOSTES.