**2014** **5** Which equation represents the line perpendicular to $2x - 3y = 8$, passing through the point (2, 0)? **1**

(A) $3x + 2y = 4$ (B) $3x + 2y = 6$ (C) $3x - 2y = -4$ (D) $3x - 2y = 6$

B

$$2x - 3y = 8$$
$$3y = 2x - 8$$
$$y = \frac{2x - 8}{3}$$

$\therefore$ gradient of perpendicular is $\frac{-3}{2}$.

$$y - 0 = \frac{-3}{2}(x - 2)$$
$$2y = -3x + 6$$
$$3x + 2y = 6$$

State Mean: **0.71**