

## Answers to MEEG 3013 Test IIIb

1. (a)  $C_y = \frac{3M_0}{2L} \uparrow$

(b)  $y'_A = \frac{5M_0L}{4EI}$

(c)  $y_A = -\frac{3M_0L^2}{4EI}$

2. (a)  $A_y = \frac{41}{72}w_0L \uparrow$ ,  $M_A = \frac{41}{72}w_0L^2 \curvearrowright$

(b)  $y_B = -\frac{41w_0L^4}{216EI}$   $\left( \mathbf{B}_y^c = \frac{5w_0L^3}{16EI} \uparrow \right)$

(c)  $y_C = -\frac{47w_0L^4}{432EI}$ ,  $\theta_C = \frac{7w_0L^3}{48EI}$

3. A. (b)

B. (f)

C. (a)

D. (g)

4. (See text and paper.)