These are alleged answers. For each error herein, you get extra-credit points for being the first to report it by e-mail.

1 (a) \[ NQ = 6x + 3h \]

(b) \[ NQ = 30 - 18x - 9h \] \hspace{1cm} \text{Corrected}

(c) \[ NQ = 9 \]

2 (a) \[ A_{\text{max}} = 3, \text{ when } x = 2 \text{ and } y = 3/2. \]

(b) \[ A_{\text{min}} = -3, \text{ when } x = -2 \text{ and } y = 3/2. \]

(c) \[ S_{\text{min}} = 13, \text{ when } x = 3 \text{ and } y = 2. \]

3 (a) \[ f(x) = \frac{3}{4}x - \frac{2}{5} \text{ has inverse } f^{-1}(x) = \frac{20x + 8}{15} \]

(b) \[ f(x) = \frac{2x + 5}{x + 4} \text{ has inverse } f^{-1}(x) = \frac{-4x + 5}{x - 2} \]

(c) \[ f(x) = 4 - \sqrt{2x + 5} \text{ has inverse } f^{-1}(x) = \frac{x^2 - 8x + 11}{2} \text{ with } x \leq 4 \]

(d) \[ f(x) = 4 + \sqrt{2x + 5} \text{ has inverse } f^{-1}(x) = \frac{x^2 - 8x + 11}{2} \text{ with } x \geq 4 \]

4 (a) \[ P(x) = x^4 + 8x^3 - 4x^2 - 32x \]

(b) 0, ±2, and 8

(c) 1, 3, and ±5

(d) −4, ±1, 0

(e) 0, ±2, and −8

(f) −16, ±4, 0

(g) 2, 4, 6, and 12