b) $\Delta A = A(1) - A(0) = 2 - (-2) = 4 \text{ ft}$

c) $\Delta A = A(1) - A(0.5) = 2 - 0 = 2 \text{ ft}$

d) $\Delta A = A(1.5) - A(1) = 0 - 2 = -2 \text{ ft}$

e) $2 \sin \pi (t - 0.5) = 1$

$\sin \pi (t - 0.5) = \frac{1}{2}$

(i) $\pi (t - 0.5) = \frac{\pi}{6}$ OR (ii) $\pi (t - 0.5) = \frac{5\pi}{6}$

$t - 0.5 = \frac{1}{6}$

$t = \frac{2}{3} \text{ minutes}$

$t - 0.5 = \frac{5}{6}$

$t = \frac{4}{3} \text{ minutes}$

Graph has period 2, so A(t)...

$t = \frac{2}{3} + 2 = \frac{8}{3} \text{ min}$ and $t = \frac{4}{3} + 2 = \frac{10}{3} \text{ min}$

f) By looking at the graph: $t = 0, 2, 4 \text{ min}$