Chapter 11, Solution 31.

$$V^2_{rms} = \frac{1}{2}\int_0^2 v(t)dt = \frac{1}{2}\left[\int_0^1 (2t)^2\,dt + \int_1^2 (-4)^2\,dt\right] = \frac{1}{2}\left[\frac{4}{3} + 16\right] = 8.6667$$

$$V_{rms} = \underline{\mathbf{2.944\ V}}$$