Chapter 11, Solution 34.

$$f_{rms}^2 = \frac{1}{T}\int_0^T f^2(t)dt = \frac{1}{3}\left[\int_0^2 (3t)^2\,dt + \int_2^3 6^2\,dt\right]$$

$$= \frac{1}{3}\left[\frac{9t^3}{3}\bigg|_0^2 + 36\right] = 20$$

$$f_{rms} = \sqrt{20} = 4.472$$

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