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Corrections below pertain to *Advanced Engineering Mathematics* (5th ed.) by Peter V. O'Neil, Brooks/Cole, 2003.

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### §4.3 Singular points and the Method of Frobenius

- On P. 178, the theorem should say

$$\sum_{n=0}^{\infty} c_n (x - x_0)^{n+r}$$

instead of  $\sum_{n=0}^{\infty} c_n (x - x_0)^r$ .

- On PP. 179-180, references to Chapters 16 and 18 should be to 15 and 17, respectively.

### §4.5 Appendix on power series, P. 192

- The second set of equations should include

$$\sum_{n=0}^{\infty} c_n (x - x_0)^n$$

instead of  $\sum_{n=0}^{\infty} c_n (x - x_0)^k$ .

- The third set of equations should include

$$\sum_{j=0}^n a_j b_{n-j}$$

instead of  $\sum_{j=0}^n a_n b_{n-j}$ .

### §15.1 Legendre polynomials, P. 766

Equation (15.4) should be

$$a_{n+2} = \frac{n(n+1) - \lambda}{(n+1)(n+2)} a_n.$$

The text leaves off the factor of  $a_n$ .

### §15.2 Bessel functions, P. 800

The third set of equations on this page should be  $L\theta'' + 2L'\theta' + g \sin \theta = 0$ . In the second term, the text omits a prime (') on the  $\theta$ .