

# Answer Key

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## Practice C

1.  $-\frac{3}{2}, -\frac{1}{2}, 4$     2.  $-4, -1, \frac{2}{3}, 1$     3.  $-1, -\frac{1}{5}, \frac{5}{2}, 3$
4.  $-\frac{3}{4}, -\frac{1}{2}, \frac{1}{3}, 2$     5.  $-3, -\frac{7}{2}, -\frac{1}{3}, 1$
6.  $-\frac{5}{2}, -\frac{3}{2}, \frac{1}{2}$     7.  $-7, \frac{5 - \sqrt{21}}{2}, \frac{5 + \sqrt{21}}{2}$
8.  $4 - \sqrt{14}, \frac{1}{6}, 4 + \sqrt{14}$
9.  $-1 - \sqrt{6}, -\frac{4}{3}, -1 + \sqrt{6}$
10.  $-3 - 2\sqrt{2}, -1, -3 + 2\sqrt{2}, 3$
11.  $-\frac{5 - \sqrt{17}}{4}, -1, -\frac{2}{3}, -\frac{5 + \sqrt{17}}{4}$
12.  $-\frac{5}{2}, -\frac{1 - \sqrt{13}}{6}, -\frac{1 + \sqrt{13}}{6}, \frac{1}{2}$
13.  $-\frac{9}{2}, -3, -\frac{5}{3}, 4$     14.  $-\frac{7}{2}, -3, -\frac{5}{2}, \frac{1}{2}$
15.  $a_0$  cannot be 0.    16.  $x(x^3 - x^2 - 24x - 36)$
17.  $-3, -2, 6$     18.  $-2, -\frac{1}{3}, 0, 2$
19.  $-2, -1, 1$     20. The zeros of  $f(x)$  are also the zeros of  $af(x)$ .    21. To apply the rational zero theorem, the coefficients must be integers.
22.  $2f(x) = x^3 - 19x - 30; -3, -2, 5$