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4. Solution of  $ax + b$  is:

2. Solution of  $ax^2 + bx + c$  is:

3. Solution of  $ax^3 + bx^2 + cx + d$  is:

4. Solution of  $x^4 + ax^3 + bx^2 + cx + d$  is:

$$r_4 = -\frac{a}{4} - \frac{1}{2} \sqrt{\frac{a^2}{4} - \frac{2b}{3} + \frac{2^{\frac{1}{3}}(b^2 - 3ac + 12d)}{3 \left( 2b^3 - 9abc + 27c^2 + 27a^2d - 72bd + \sqrt{-4(b^2 - 3ac + 12d)^3 + (2b^3 - 9abc + 27c^2 + 27a^2d - 72bd)^2} \right)^{\frac{1}{3}}} + \left( \frac{2b^3 - 9abc + 27c^2 + 27a^2d - 72bd + \sqrt{-4(b^2 - 3ac + 12d)^3 + (2b^3 - 9abc + 27c^2 + 27a^2d - 72bd)^2}}{54} \right)^{\frac{1}{3}}} \\ + \frac{1}{2} \sqrt{\frac{a^2}{2} - \frac{4b}{3} + \frac{2^{\frac{1}{3}}(b^2 - 3ac + 12d)}{3 \left( 2b^3 - 9abc + 27c^2 + 27a^2d - 72bd + \sqrt{-4(b^2 - 3ac + 12d)^3 + (2b^3 - 9abc + 27c^2 + 27a^2d - 72bd)^2} \right)^{\frac{1}{3}}} - \left( \frac{2b^3 - 9abc + 27c^2 + 27a^2d - 72bd + \sqrt{-4(b^2 - 3ac + 12d)^3 + (2b^3 - 9abc + 27c^2 + 27a^2d - 72bd)^2}}{54} \right)^{\frac{1}{3}}} + \frac{-a^3 + 4ab - 8c}{4 \sqrt{\frac{a^2}{4} - \frac{2b}{3} + \frac{2^{\frac{1}{3}}(b^2 - 3ac + 12d)}{3 \left( 2b^3 - 9abc + 27c^2 + 27a^2d - 72bd + \sqrt{-4(b^2 - 3ac + 12d)^3 + (2b^3 - 9abc + 27c^2 + 27a^2d - 72bd)^2} \right)^{\frac{1}{3}}} + \left( \frac{2b^3 - 9abc + 27c^2 + 27a^2d - 72bd + \sqrt{-4(b^2 - 3ac + 12d)^3 + (2b^3 - 9abc + 27c^2 + 27a^2d - 72bd)^2}}{54} \right)^{\frac{1}{3}}}} \quad (7)$$