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**Conclusion:**  $\frac{x^5 + x^4 - 5x^3 - x^2 + 8x - 4}{(x - 1)(x + 2)} = x^3 - 3x + 2$

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**Alternatively:**

$$x^5 + x^4 - 5x^3 - x^2 + 8x - 4 = (x - 1) \cdot (x + 2) \cdot (x^3 - 3x + 2)$$