

5.2-5.3 Skills Practice #1**Use long or synthetic division.**

1. $(x^3 - 10x^2 + 19x + 30) \div (x - 6)$

2. $(x^3 - 4x + 6) \div (x + 3)$

3. $(4x^4 - 15x^2 - 4) \div (x + 2)$

4. $(3x^3 + 11x^2 + 4x + 1) \div (x^2 + x)$

5. $(x^4 - 5x^3 - 8x^2 + 13x - 12) \div (x - 6)$

6. $(3x^3 + 34x^2 + 72x - 64) \div (3x - 2)$

7. When the polynomial $x^4 + 4x^3 + 5x^2 + 16x - 16$ is divided by $x + 4$, the quotient is $x^3 + Ax + B$. What are the values of A and B?