

Math 3 Advanced

6.5 Practice Part 1 with KEY

Simplify a polynomial expression using long division.

1. $(3x^3 - 17x^2 + 13x + 4) \div (3x - 2)$

2. $(6x^3 - 28x^2 + 19x + 3) \div (3x - 2)$

3. $(2a^3 - 7a^2 - 5a + 17) \div (2a + 3)$

4. $(2b^3 - 3b^2 - 8b + 4) \div (2b + 1)$

5. $(2x^3 - 3x^2 - 11x + 6) \div (2x - 1)$

6. $(2a^3 + 7a^2 - 5a - 4) \div (2a + 1)$

7. $(10c^3 + c^2 - 7c + 2) \div (5c - 2)$

8. $(2x^3 - 9x^2 + 17x + 12) \div (2x - 3)$

Answer List

1. $x^2 - 5x + 1, R = 6$

3. $a^2 - 5a + 5, R = 2$

5. $x^2 - x - 6$

7. $2c^2 + c - 1$

2. $2x^2 - 8x + 1, R = 5$

4. $b^2 - 2b - 3, R = 7$

6. $a^2 + 3a - 4$

8. $x^2 - 3x + 4, R = 24$