

Division by $ax + b$

Find the quotient and remainder in each of the following questions

1. $4x^2 + 6x - 2$ divided by $2x - 1$
2. $4x^3 - 2x^2 + 6x - 1$ divided by $2x - 1$
3. $6x^2 - 5x + 2$ divided by $3x - 1$
4. $9x^2 - 6x - 10$ divided by $3x + 1$
5. $3x^3 + 5x^2 - 11x + 8$ divided by $3x - 1$
6. $2x^3 + 7x^2 - 5x + 4$ divided by $2x + 1$
7. $2x^3 - x^2 - 1$ divided by $2x + 3$
8. $5x^3 + 21x^2 + 9x - 1$ divided by $5x + 1$
9. $6x^3 + x^2 + 1$ divided by $2x - 3$

Solutions

quotient	remainder
1. $2x + 4$	2
2. $2x^2 + 3$	2
3. $2x - 1$	1
4. $3x - 3$	-7
5. $x^2 + 2x - 3$	5
6. $x^2 + 3x - 4$	8
7. $x^2 - 2x + 3$	-10
8. $x^2 + 4x + 1$	-2