

Factor out the GCF

Take the common factor out of each expression. If you can't factorize, write 'prime'.

(1) $6x^3 - 3x^5$

(2) $24x + 6$

(3) $50p^3 + 50p^2 - 20$

(4) $-3q^3 + 15q^2 - 6q$

(5) $12x^2 + 4x - 12$

(6) $14x - 21x^2 + 21x^3$

(7) $-8x^8 + 24x^6 + 12x^5$

(8) $20 - 35x^2 - 20x^3$

(9) $-90x^5 + 100x + 60$

(10) $36r^2 + 18r^3 + 6r^4$

Factor out the GCF

Answers

(1) $6x^3 - 3x^5$

$3x^3(2 - x^2)$

(3) $50p^3 + 50p^2 - 20$

$10(5p^3 + 5p^2 - 2)$

(5) $12x^2 + 4x - 12$

$4(3x^2 + x - 3)$

(7) $-8x^8 + 24x^6 + 12x^5$

$4x^5(-2x^3 + 6x + 3)$

(9) $-90x^5 + 100x + 60$

$10(-9x^5 + 10x + 6)$

(2) $24x + 6$

$6(4x + 1)$

(4) $-3q^3 + 15q^2 - 6q$

$3q(-q^2 + 5q - 2)$

(6) $14x - 21x^2 + 21x^3$

$7x(2 + 3x + 3x^2)$

(8) $20 - 35x^2 - 20x^3$

$5(4 - 7x^2 - 4x^3)$

(10) $36r^2 + 18r^3 + 6r^4$

$6r^2(6 + 3r + r^2)$