

# Algebra

## A015-Factor-Out the Greatest Common Factor



Factor-out the greatest common factor.

<b>1.</b> $3x + 12$ A) $3x(x + 4)$ B) $3(x + 12)$ C) $3(x + 4)$ D) $12(3x + 1)$	<b>6.</b> $18x^3 - 27x^2$ A) $3x(6x^2 - 9x)$ B) $3x^2(6x - 9)$ C) $9(2x^3 - 3x^2)$ D) $9x^2(2x - 3)$
<b>2.</b> $25x - 15$ A) $5(5x - 3)$ B) $15(25x - 1)$ C) $5(5x + 3)$ D) $25(x - 15)$	<b>7.</b> $36x^4 - 9x$ A) $9x(4x^3 - 1)$ B) $9x(4x^3)$ C) $9x^4(36 - x)$ D) $3x(12x^3 - 3)$
<b>3.</b> $3x^2 + 9x - 6$ A) $3(x^2 + 3x + 3)$ B) $3x(x^2 + x - 2)$ C) $3x(x + 3 - 2)$ D) $3(x^2 + 3x - 2)$	<b>8.</b> $24x^3y^4 + 30x^3y^3 - 37x^2y$ A) $3x^2y(8xy^3 + 10xy^2 - 19)$ B) $3xy(8x^2y^3 + 10x^2y^2 - 19x)$ C) $x^2y(24xy^3 + 30xy^2 - 37)$ D) $x^2y(24xy^2 + 30xy^2 - 37)$
<b>4.</b> $14x^2 + 35x + 7$ A) $7(2x^2 + 5x)$ B) $7x(2x^2 + 5x + 1)$ C) $7(2x^2 + 5x + 1)$ D) $7x(2x^2 + 5x)$	<b>9.</b> $9x^4y^2z^3 + 12x^3y^2z^4 + 18x^2yz^5$ A) $9x^2yz^3(x^2y + 3xyz + 2z^2)$ B) $3x^2yz^3(3x^2y + 4xyz + 6z^2)$ C) $3x^2yz^3(3x^2yz + 4xyz + 6xyz^2)$ D) $3x^2yz^3(3x^2yz + 4xyz + 6z^3)$
<b>5.</b> $12x^2 + 16x$ A) $4(3x^2 + 4)$ B) $4(3x^2 + 4x)$ C) $4x(3x + 4x)$ D) $4x(3x + 4)$	<b>10.</b> $16x^2y^4 + 24x^3y^3 - 35xy^2$ A) $4xy^2(4xy^2 + 6x^2y - 9)$ B) $4xy^2(4xy^2 + 6x^2y - 15)$ C) $4xy^2(4xy^2 + 6x^2y - 35xy^2)$ D) $xy^2(16xy^2 + 24x^2y - 35)$