



## Algebraic Functions - Simplify to Bracketed Terms, Different Variables, with Coefficient

**1** Which answer is the same expression as this

$$24zx + 28x + 54z + 63$$

- |                        |                       |
|------------------------|-----------------------|
| A $(4z + 24)(6x + 28)$ | B $(4z + 24)(6x + 7)$ |
| C $(6z + 7)(4x + 9)$   | D $(z - 6)(4x + 7)$   |
| E $(9z + 6)(7x + 28)$  | F $(6z + 6)(7x - 7)$  |

**2** Which answer is the same expression as this

$$6nb + 54b + 4n + 36$$

- |                      |                       |
|----------------------|-----------------------|
| A $(6n + 6)(9b - 9)$ | B $(6n + 6)(6b + 54)$ |
| C $(n - 6)(6b + 9)$  | D $(n + 6)(9b + 54)$  |
| E $(n + 9)(6b + 4)$  | F $(6n + 6)(6b + 9)$  |

**3** Which answer is the same expression as this

$$6cz + 24z + 6c + 24$$

- |                       |                      |
|-----------------------|----------------------|
| A $(3c + 2)(8z + 24)$ | B $(3c + 6)(2z + 8)$ |
| C $(2c + 2)(8z - 8)$  | D $(2c + 8)(3z + 3)$ |
| E $(3c + 6)(2z + 24)$ | F $(c - 2)(3z + 8)$  |

**4** Which answer is the same expression as this

$$14nb + 49b + 8n + 28$$

- |                        |                       |
|------------------------|-----------------------|
| A $(2n + 2)(7b - 7)$   | B $(4n + 2)(7b + 49)$ |
| C $(7n + 14)(2b + 49)$ | D $(7n + 14)(2b + 7)$ |
| E $(n - 2)(7b + 7)$    | F $(2n + 7)(7b + 4)$  |

**5** Which answer is the same expression as this

$$2bx + 12x + 7b + 42$$

- |                      |                       |
|----------------------|-----------------------|
| A $(b + 5)(6x + 12)$ | B $(5b + 5)(6x - 6)$  |
| C $(2b + 2)(5x + 6)$ | D $(b - 5)(2x + 6)$   |
| E $(b + 6)(2x + 7)$  | F $(2b + 2)(5x + 12)$ |

**6** Which answer is the same expression as this

$$27mc + 54c + 12m + 24$$

- |                       |                        |
|-----------------------|------------------------|
| A $(3m + 6)(9c + 4)$  | B $(9m + 27)(3c + 54)$ |
| C $(m - 3)(9c + 6)$   | D $(3m + 3)(6c - 6)$   |
| E $(9m + 27)(3c + 6)$ | F $(4m + 3)(6c + 54)$  |

**7** Which answer is the same expression as this

$$6zd + 42d + 8z + 56$$

- |                       |                      |
|-----------------------|----------------------|
| A $(z - 5)(6d + 7)$   | B $(6z + 6)(5d + 7)$ |
| C $(6z + 6)(5d + 42)$ | D $(z + 5)(7d + 42)$ |
| E $(z + 7)(6d + 8)$   | F $(5z + 5)(7d - 7)$ |

**8** Which answer is the same expression as this

$$4bz + 28z + 7b + 49$$

- |                       |                      |
|-----------------------|----------------------|
| A $(4b + 4)(7z + 28)$ | B $(7b + 7)(7z - 7)$ |
| C $(b - 7)(4z + 7)$   | D $(4b + 4)(7z + 7)$ |
| E $(b + 7)(4z + 7)$   | F $(b + 7)(7z + 28)$ |