



Math worksheet on 'Algebraic Functions - Simplify to Bracketed Terms, Different Variables (Level 2)'. Part of a broader unit on 'Polynomials and Quadratics - Advanced'

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

$$br + 4r - 8b - 32$$

- |                            |                             |
|----------------------------|-----------------------------|
| <b>a</b> $(b + 4)(r - 8)$  | <b>b</b> $(b + 4)(r + 8)$   |
| <b>c</b> $(b - 4)(r + 8)$  | <b>d</b> $(b + 32)(r - 8)$  |
| <b>e</b> $(b + 4)(r - 12)$ | <b>f</b> $(b - 32)(r + 12)$ |

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

$$xn + 6n - 3x - 18$$

- |                            |                            |
|----------------------------|----------------------------|
| <b>a</b> $(x - 18)(n + 9)$ | <b>b</b> $(x + 18)(n - 3)$ |
| <b>c</b> $(x + 6)(n - 3)$  | <b>d</b> $(x - 6)(n + 3)$  |
| <b>e</b> $(x + 6)(n - 9)$  | <b>f</b> $(x + 6)(n + 3)$  |

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

$$dy + 7y - 7d - 49$$

- |                             |                            |
|-----------------------------|----------------------------|
| <b>a</b> $(d + 7)(y - 7)$   | <b>b</b> $(d + 49)(y - 7)$ |
| <b>c</b> $(d - 7)(y + 7)$   | <b>d</b> $(d + 7)(y + 7)$  |
| <b>e</b> $(d - 49)(y + 14)$ | <b>f</b> $(d + 7)(y - 14)$ |

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

$$br + 8r + 2b + 16$$

- |                             |                            |
|-----------------------------|----------------------------|
| <b>a</b> $(b - 8)(r + 2)$   | <b>b</b> $(b + 8)(r + 10)$ |
| <b>c</b> $(b + 16)(r + 10)$ | <b>d</b> $(b + 8)(r - 2)$  |
| <b>e</b> $(b + 16)(r + 2)$  | <b>f</b> $(b + 8)(r + 2)$  |

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

$$md + 9d - 8m - 72$$

- |                             |                            |
|-----------------------------|----------------------------|
| <b>a</b> $(m - 72)(d + 17)$ | <b>b</b> $(m + 9)(d + 8)$  |
| <b>c</b> $(m + 9)(d - 8)$   | <b>d</b> $(m + 72)(d - 8)$ |
| <b>e</b> $(m - 9)(d + 8)$   | <b>f</b> $(m + 9)(d - 17)$ |

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

$$mz - 3z - 4m + 12$$

- |                           |                            |
|---------------------------|----------------------------|
| <b>a</b> $(m + 3)(z - 4)$ | <b>b</b> $(m + 12)(z - 4)$ |
| <b>c</b> $(m + 3)(z + 4)$ | <b>d</b> $(m + 3)(z - 7)$  |
| <b>e</b> $(m - 3)(z + 4)$ | <b>f</b> $(m - 3)(z - 4)$  |

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

$$xz + 3z + 4x + 12$$

- |                           |                            |
|---------------------------|----------------------------|
| <b>a</b> $(x + 3)(z + 7)$ | <b>b</b> $(x - 3)(z + 4)$  |
| <b>c</b> $(x + 3)(z - 4)$ | <b>d</b> $(x + 12)(z + 4)$ |
| <b>e</b> $(x + 3)(z + 4)$ | <b>f</b> $(x + 12)(z + 7)$ |