



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

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

$$by - 3y - 7b + 21$$

- |                            |                           |
|----------------------------|---------------------------|
| <b>a</b> $(b + 3)(y - 10)$ | <b>b</b> $(b - 3)(y - 7)$ |
| <b>c</b> $(b + 3)(y + 7)$  | <b>d</b> $(b - 3)(y + 7)$ |
| <b>e</b> $(b + 21)(y - 7)$ | <b>f</b> $(b + 3)(y - 7)$ |

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

$$nc + 6c + 2n + 12$$

- |                            |                            |
|----------------------------|----------------------------|
| <b>a</b> $(n + 12)(c + 2)$ | <b>b</b> $(n + 12)(c + 8)$ |
| <b>c</b> $(n + 6)(c - 2)$  | <b>d</b> $(n + 6)(c + 8)$  |
| <b>e</b> $(n - 6)(c + 2)$  | <b>f</b> $(n + 6)(c + 2)$  |

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

$$xc + 8c + 2x + 16$$

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

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

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

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

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

$$pn + 7n + 8p + 56$$

- |                            |                             |
|----------------------------|-----------------------------|
| <b>a</b> $(p + 56)(n + 8)$ | <b>b</b> $(p - 7)(n + 8)$   |
| <b>c</b> $(p + 7)(n + 8)$  | <b>d</b> $(p + 7)(n + 15)$  |
| <b>e</b> $(p + 7)(n - 8)$  | <b>f</b> $(p + 56)(n + 15)$ |

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

$$xp + 3p - 2x - 6$$

- |                           |                           |
|---------------------------|---------------------------|
| <b>a</b> $(x + 3)(p - 2)$ | <b>b</b> $(x + 3)(p - 5)$ |
| <b>c</b> $(x - 3)(p + 2)$ | <b>d</b> $(x + 3)(p + 2)$ |
| <b>e</b> $(x + 6)(p - 2)$ | <b>f</b> $(x - 6)(p + 5)$ |

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

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

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