

## Answers

- 1**   **a**    $2x^3y^3(3x - 5y)$                       **b**    $7a^3b^2(3b^3 + 5a^2)$   
       **c**    $5x^2y^2(5 - 2x + 3y)$
- 2**   **a**    $(x + 3)(x + 4)$                       **b**    $(x + 7)(x - 2)$   
       **c**    $(x - 5)(x - 6)$                       **d**    $(x - 8)(x + 3)$   
       **e**    $(x - 9)(x + 2)$                       **f**    $(x + 5)(x - 4)$   
       **g**    $(x - 8)(x + 5)$                       **h**    $(x + 7)(x - 4)$
- 3**   **a**    $(6x - 7y)(6x + 7y)$                       **b**    $(2x - 9y)(2x + 9y)$   
       **c**    $2(3a - 10bc)(3a + 10bc)$
- 4**   **a**    $(x - 1)(2x + 3)$                       **b**    $(3x + 1)(2x + 5)$   
       **c**    $(2x + 1)(x + 3)$                       **d**    $(3x - 1)(3x - 4)$   
       **e**    $(5x + 3)(2x + 3)$                       **f**    $2(3x - 2)(2x - 5)$
- 5**   **a**    $\frac{2(x+2)}{x-1}$                                       **b**    $\frac{x}{x-1}$   
       **c**    $\frac{x+2}{x}$                                               **d**    $\frac{x}{x+5}$   
       **e**    $\frac{x+3}{x}$                                               **f**    $\frac{x}{x-5}$
- 6**   **a**    $\frac{3x+4}{x+7}$                                               **b**    $\frac{2x+3}{3x-2}$   
       **c**    $\frac{2-5x}{2x-3}$                                               **d**    $\frac{3x+1}{x+4}$
- 7**    $(x + 5)$
- 8**    $\frac{4(x+2)}{x-2}$