

CHAPTER 5 EXAM REVIEW FINAL ANSWERS

(Revised Fall 2016)

1. (a) $2x^2 + 8xy - 15y^2$ (b) $-7x^2 - 8xy - 7y^2$

2. (a) $5x(2y - 5)$ (b) $2xy^3(3x^2 - 2xy + y^2)$ (c) $(x - 8)(x - 5)$ (d) $(x + 4)(x + 3)$

(e) $9(x^2 + 9y^2)$ * You cannot factor this further. Do you know why? (f) $(m - 2)(4m + 5)$

(g) $(a - 9b)(a + 9b)$ (h) $(x - 6)(x + 5)$ (i) $(2z + 7)(x - 3y)$ (j) $(d + 2)(2d - 3c)$

(k) unfactorable (l) $5(x - 1)(3x + 2)$ (m) $(3a - b)(7a + 2b)$ (n) $(5x - 3y)(3x - 2y)$

(o) $7(x - 3)(x + 3)$ (p) $2x(x - 4)(x - 1)$

3. (a) vertex $(3, -16)$

(b) $y = x^2 - 6x - 7$

(c) $y = (x - 7)(x + 1)$. Hence, the zeroes are $x = 7$ and $x = -1$

4. (a) $x = 6$ and $x = -3$

(b) $x = 1 \frac{1}{2}$ * don't forget that it must begin with " $x =$ "

(c) $(1\frac{1}{2}, -20\frac{1}{4})$

(d)

