

1. a. Write $4x^2 - 3 - 4x^3 + x$ in standard form: $-4x^3 + 4x^2 + x - 3$

b. How many terms? 4

c. What is the leading coefficient? -4

d. What is the degree? 3

2. Write an example of a quadratic binomial: $x^2 + 6$ (2 terms, highest degree = 2)

#3-10, Simplify each if possible

3. $3z^2 + 15z - z^2 + 8 - z$

$2z^2 + 14z + 8$

4. $3m(2 - 4m) - (m + 8m^2)$

$6m - 12m^2 - m - 8m^2$

$-20m^2 + 5m$

5. $(3w^3 - 2w^2 + 5w) + (12w^3 + 2w^2 - 9w - 20)$

$15w^3 - 4w - 20$

6. $(11m^2n)(-3m^3n)$

$-33m^5n^2$

7. $(3g - 7)(10g + 2)$

$30g^2 + 6g - 70g - 14$

$30g^2 - 64g - 14$

8. $(3y - 9)(2y^2 - 6y + 10)$

$6y^3 - 18y^2 + 30y - 18y^2 + 54y - 90$

$6y^3 - 36y^2 + 84y - 90$

9. $(3w - 1)^2$

$(3w - 1)(3w - 1)$

$9w^2 - 3w - 3w + 1$

$9w^2 - 6w + 1$

10. $(m - 5)(m + 4) - (2m - 3)$

$m^2 + 4m - 5m - 20 - 2m + 3$

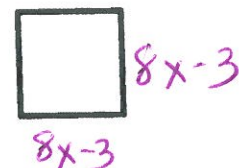
$m^2 - 3m - 17$

11. The square at right has side lengths of $(8x - 3)$ inches.

a. Find the perimeter of the square:

$4(8x - 3)$

$32x - 12$ inches



b. Find the area of the square:

$64x^2 - 48x + 9$ in² $(8x - 3)(8x - 3)$