Homework Review - 9.1

(40) $-18.53t^2 + 975.8t + 48{,}140$ ← # in public

$80.8t + 8049$ ← # in private

$-20t^2 + 1000t + 55{,}000$

$-20t^2 + 1000t + 5000$

$-20(30^2) + 1000(30) + 5000$

$-18{,}000 + 30000 + 5000 = 17{,}000$

$40(30) + 8000 =$

$2400 + 8000 = 10{,}000$

2012 10%

1985

$t = 27$

≈ 30

$\frac{17{,}000}{27{,}000} = 70\%$

$= 63\%$

(30) $2x + 6 + 9x - 6 + x + 8 = \boxed{12x + 8}$

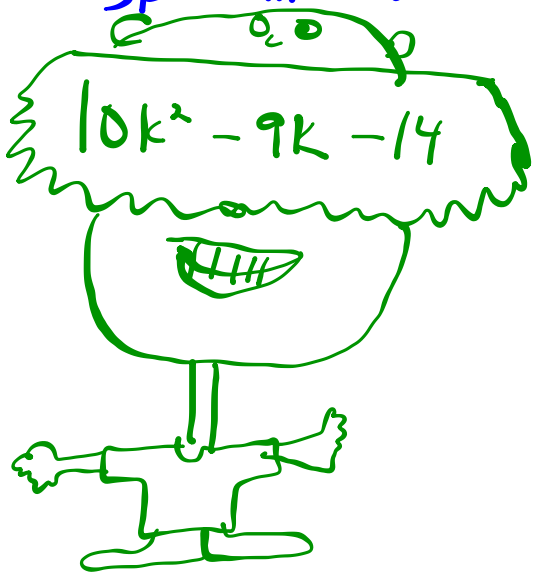
(24) $9b^3 - 13b^2 + b + 0$

$+ \quad +13b^2 + 5b - 14$

$\boxed{9b^3 + 6b - 14}$

(20) $7k^2 + 2k - 6$

$3k^2 - 11k - 8$



Multplying polynomials

$6x^2y^3\left(4x^4y^2z\right)$

$24x^6y^5z$

$24x^6y^5z$

Multiplying monomials:

Multiply non-variable #'s together

Multiply like variables (use exponent rules)

Write your answer in the proper order

Multplying polynomials, continued

$-5a^3(4a^4 - 3a + 1)$

$-20a^7 + 15a^4 - 5a^3$

Multiplying a monomial by a polynomial:

Multiply each term in the polynomial by the monomial

Simplify the resulting expression by combining like terms

Multplying polynomials, continued

$(2s + 5)(s^2 + 3s - 1)$

Multiplying polynomials:

Multiply each term in the first polynomial by each term in the second polynomial

$2s^3 + 6s^2 - 2s + 5s^2 + 15s - 5$

Combine like terms

$2s^3 + 11s^2 + 13s - 5$

2. $-5a^3(4a^4 - 3a + 1)$

3. $4d^2(-2d^3 + 5d^2 - 6d + 2)$

16. $a(3a + 1) + (a + 1)(a - 1)$

$3a^2+a+a^2-a+a-1$

$4a^2+a-1$

17. $(x + 2)(x + 5) - x(4x - 1)$

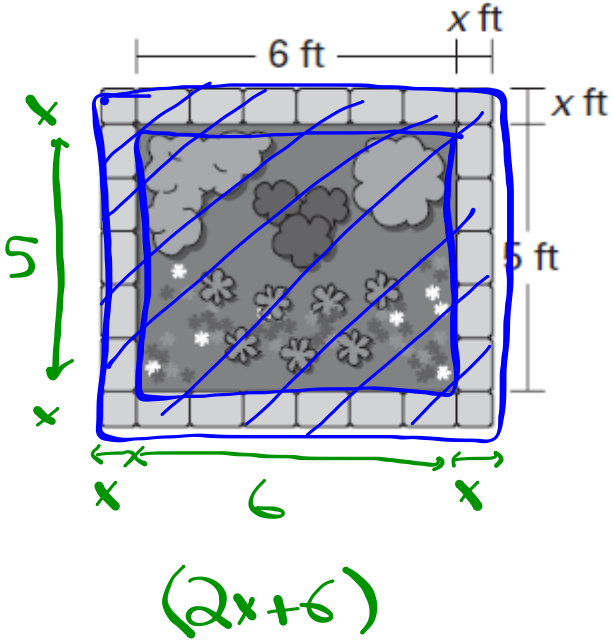
$x^2+5x+2x+10-4x^2+x$

$-3x^2+8x+10$

Flower Bed You are designing a rectangular flower bed that you will border using brick pavers. The width of the border around the bed will be the same on every side, as shown.

a. Write a polynomial that represents the total area of the flower bed and the border. (2x+5)

b. Find the total area of the flower bed and border when the width of the border is 1.5 feet.



$A = l \times w$

$(2x+5)(2x+6)$

$4x^2+12x+10x+30$

$4x^2+22x+30$

$4(1.5)^2+22(1.5)+30$

Homework:

p. 565; 3-42 (every 3rd), 50