Homework p. 596:

(19) $4n^2 + 16n + 15$

$(2n + 3)(2n + 5)$

$2v^3 + 4v$

$2v(v^2 + 2)$

(8) $-3p^2 - 10p - 3$

$-1(3p^2 + 10p + 3)$

$-1(3p + 1)(1p + 3)$

(47) $f(x) = 12x^2 - 24x - 63$

$0 = 12x^2 - 24x - 63$

1,12	-1,63	X
1,12	63,-1	X
1,12	1,-63	X
1,12	-63,1	X
2,6	-1,63	X
2,6	63,-1	X
2,6	1,-63	X
2,6	-63,1	X
3,4	-1,63	X
3,4	63,-1	X
3,4	1,-63	X
3,4	-63,1	X
1,12	-3,21	-15
1,12	21,-3	X
1,12	3,-21	15
1,12	-21,3	X
2,6	-3,21	24
2,6	21,-3	X
~~2,6~~	~~3,-21~~	
2,6	-21,3	-24
3,4	-3,21	X
3,4	21,-3	X
3,4	3,-21	X
3,4	-21,3	X
1,12	-7,9	X
1,12	9,-7	X
1,12	7,-9	X
1,12	-9,7	X
~~2,6~~	~~-7,9~~	
~~2,6~~	~~9,-7~~	-24
2,6	7,-9	X
2,6	-9,7	24
3,4	-7,9	X
3,4	9,-7	X
3,4	7,-9	X
3,4	-9,7	X

$(2x+3)(6x-21)$

$2x+3=0 \quad 6x-21=0$

$x=\frac{-3}{2} \quad x=\frac{7}{2}$

$(2x-7)(6x+9)$

$2x-7=0 \quad 6x+9=$

$x=\frac{7}{2} \quad x=\frac{-3}{9}$

Announcements:

- Skills Test on Monday 12/12
  - Factoring/Solving polynomials
  - Working with exponenents
- Unit Test (Chapter 8 and 9) - Thursday 12/15

Special Patterns when Factoring Polynomials:

$x^2 - q = (x - a)(x + a)$ --- Sometimes!

$x^2 - 16 =$ $(x+4)(x-4)$ Look at C

$x^2 + bx + c = (x + q)^2$ --- Sometimes!

$x^2 + 12x + 36 =$ $(x+6)(x+6)$ Look at C

Pull out a GCF from a trinomial --- Sometimes!
(or multiply by a constant)

$6x^2 + 12x - 48 =$

Look for common factors or common denominators

$6(x^2+2x-8)$

$6(x+4)(x-2)$

16. $8a^2 - 72 = 0$

$8(a^2-9)=0$

$8(a+3)(a-3)=0$

$a=-3 \quad a=3$

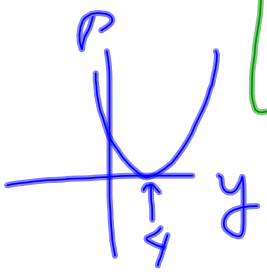
18. $-4y^2 + 32y - 64 = 0$

$\frac{-4y^2}{-4} + \frac{32y}{-4} - \frac{64}{-4} = \frac{0}{-4}$

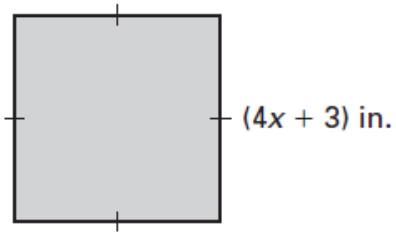
$y^2+-8y+16=0$

$(y+-4)(y+-4)$

$y=4$



26. Area $= 225$ in.^{2}



Homework:

p. 603, 3-18 by 3, 25-37 by 3, 51