

¹3 ²2 ³4 7

x 52

6 4 9 4

16 2 3 5 0

16 8, 8 4 4

$$(x + 3)(2x - 4)$$

$$\begin{array}{r} + x + 3 \\ + 2x - 4 \\ \hline - 4x - 12 \\ + 6x \\ \hline 2x^2 + 2x - 12 \end{array}$$

$$(x + 4)(3x^2 - 4x + 7)$$

$$3x^2 - 4x + 7$$

$$x + 4$$

$$\begin{array}{r} 3x^3 + 12x^2 - 16x + 28 \\ - 4x^2 + 7x \\ \hline \end{array}$$

$$3x^3 + 8x^2 - 9x + 28$$

$$(4x^2 + 3x - 5)(2x^2 + 2)$$

$$\begin{array}{r} 4x^2 + 3x - 5 \\ 2x^2 \qquad \qquad + 2 \\ \hline 8x^2 + 6x - 10 \end{array}$$

$$8x^4 + 6x^3 - 10x^2$$

$$8x^4 + 6x^3 - 2x^2 + 6x - 10$$

Multiplying Polynomials

$$(3x + 2)(2x - 4)$$

$$3x + 2$$

$$2x - 4$$

$$-12x - 8$$

$$6x^2 + 4x$$

$$6x^2 - 8x - 8$$

$$(3x + 4)(x - 3)$$

$$3x + 4$$

$$x - 3$$

$$-9x - 12$$

$$3x^2 + 4x \quad 0$$

$$3x^2 - 5x - 12$$

$$(2x + 3)(4x^2 - 5x + 1)$$

$$\begin{array}{r} 4x^2 - 5x + 1 \\ 2x + 3 \\ \hline \end{array}$$

$$12x^2 - 15x + 3$$

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

$$\hline 8x^3 + 2x^2 - 13x + 3$$

$$(x^2 - 3x + 7)(3x^2 - 4)$$

$$x^2 - 3x + 7$$

$$3x^2 \qquad \qquad -4$$

$$-4x^2 + 12x - 28$$

$$3x^4 - 9x^3 + 21x^2$$

$$3x^4 - 9x^3 + 17x^2 + 12x - 28$$

$$(3x^2 + 2x - 4)(x + 5)$$

$$3x^2 + 2x - 4$$

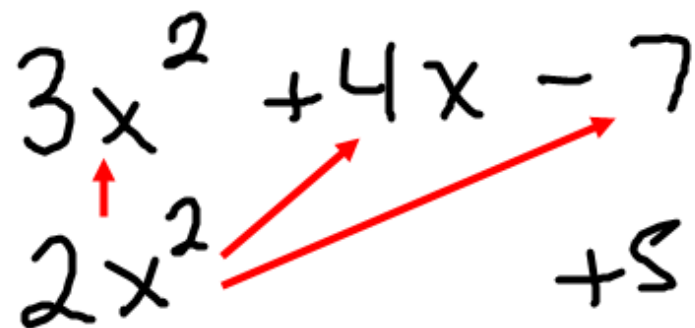
$$x + 5$$

$$15x^2 + 10x - 20$$

$$3x^3 + 2x^2 - 4x$$

$$3x^3 + 17x^2 + 6x - 20$$

$$(3x^2 + 4x - 7)(2x^2 + 5)$$

$$\begin{array}{r} 3x^2 + 4x - 7 \\ 2x^2 \quad \quad \quad + 5 \end{array}$$


$$15x^2 + 20x - 35$$

$$6x^4 + 8x^3 - 14x^2$$

$$6x^4 + 8x^3 + x^2 + 20x - 35$$

Pg. 341 Do the highlighted problems

MULTIPLYING POLYNOMIALS Find the product of the polynomials.

27. $x(x^2 + 6x - 7)$

28. $10x^2(x - 5)$

29. $-4x(x^2 - 8x + 3)$

30. $5x(3x^2 - x + 3)$

31. $(x - 4)(x - 7)$

32. $(x + 9)(x - 2)$

33. $(x + 3)(x^2 - 4x + 9)$

34. $(x + 8)(x^2 - 7x - 3)$

35. $(2x + 5)(3x^3 - x^2 + x)$

36. $(6x + 2)(2x^2 - 6x + 1)$

37. $(x + 11)(x^2 - 5x + 9)$

38. $(4x^2 - 1)(x^2 - 6x + 9)$

39. $(x - 1)(x^3 + 2x^2 + 2)$

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

41. $(3x^2 - 2)(x^2 + 4x + 3)$

42. $(-x^3 - 2)(x^2 + 3x - 3)$

43. $(x^2 + x + 4)(2x^2 - x + 1)$

44. $(x^2 - x - 3)(x^2 + 4x + 2)$