

Simplify and
write in
Standard Form



$$1. 2x(3x + 5) = 6x^2 + 10x$$



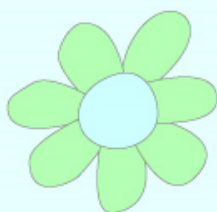
$$2. -4x^2(2x + 3x^2 - 1) = -12x^3 - 8x^4 + 4x^2$$

$$-8x^3 - 12x^4 + 4x^2$$

Factor



$$3. 18x^7 - 24x^5 + 6x^2 = 6x^2(3x^5 - 4x^3 + 1)$$



(39)

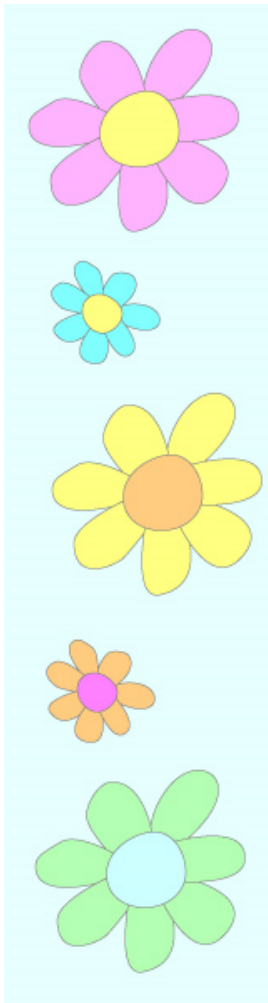
$$\frac{7g^2k^3 - 35g^5k^2}{7g^2k^2} \quad \frac{7g^2k^2}{7g^2k^2}$$
$$7g^2k^2(k - 5g^3)$$

(21)

$$\frac{10x^3}{5} + \frac{25x^2}{5} + \frac{20}{5}$$
$$5(2x^3 + 5x^2 + 4)$$

$$5x^4 + 4x^3 + 3x^2$$

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



Section 9.3 Multiplying Binomials



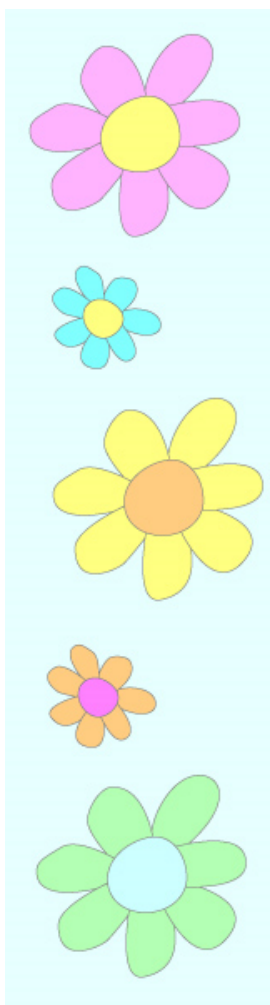
Using F.O.I.L.

$$(8w + 2)(w + 5) =$$

$$8w^2 + 40w + 2w + 10$$

$$8w^2 + 42w + 10$$

First
Outside
Inside
Last

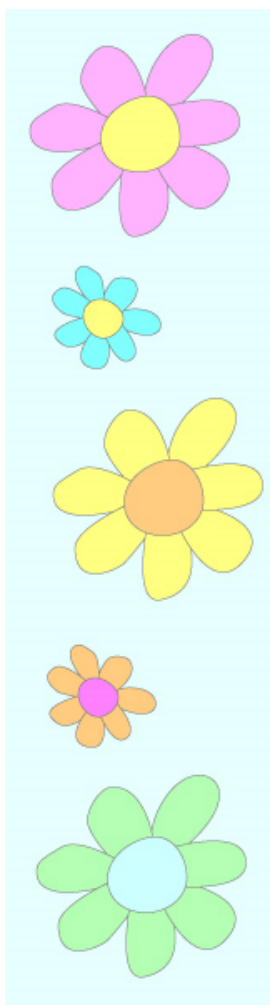


Using area to multiply ...

$$(5a + 2)(6a - 1) =$$

$$30a^2 - 5a + 12a - 2$$

$$30a^2 + 7a - 2$$

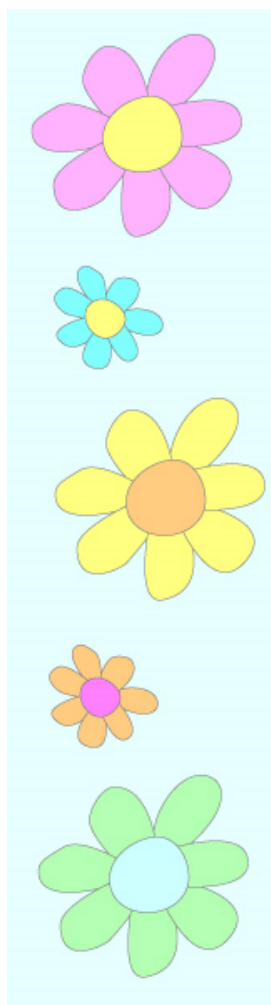


Using the Distributive Property ...

$$(2y + 5)(y - 3) =$$

$$2y^2 - 6y + 5y - 15$$

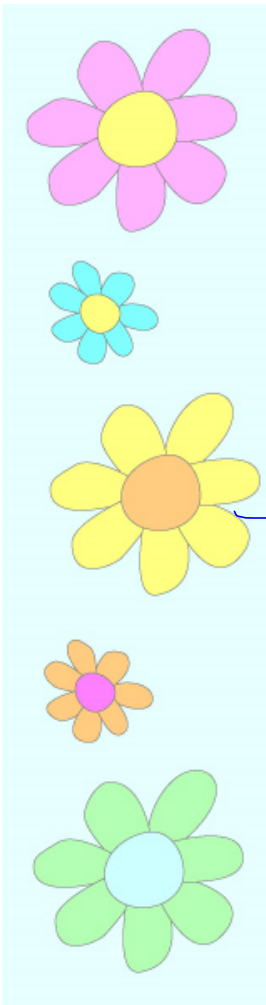
$$2y^2 - y - 15$$



$$(3k^2 + 2)(k + 5k^2) =$$

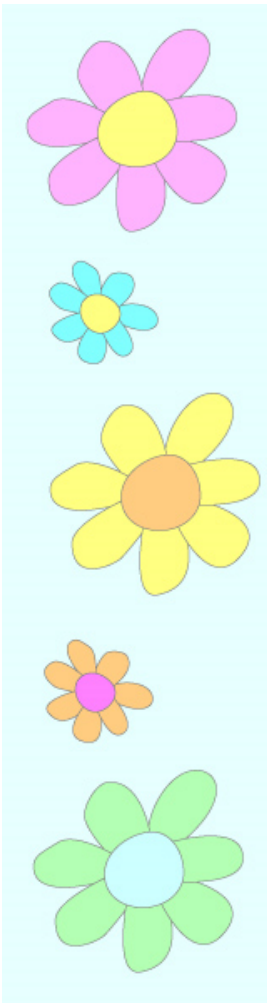
$$3k^3 + 15k^4 + 2k + 10k^2$$

$$15k^4 + 3k^3 + 10k^2 + 2k$$


$$(x+9)(x^2-4x+1) =$$

$$\begin{aligned} & x^3 - 4x^2 + x \\ & + 9x^2 - 36x + 9 \end{aligned}$$

$$x^3 + 5x^2 - 35x + 9$$



Homework:

p. 507 (5-19, 30-38)

Quiz ~~Thursday~~ over Sections 9.1 - 9.2
friday