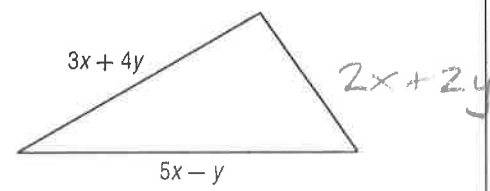


Ch 8 REVIEW: Finish Pg1-2 During Class

T8-1: I can write polynomials in standard form, name leading coefficient, name degree and perform addition and subtraction on polynomials.

<p>1. $(5a^2 + 6a + 2) + (-7a^2 + 7a + 3)$</p> <p>Standard Form: <u>$-2a^2 + 13a - 3$</u></p> <p>Degree: <u>2</u> Leading Coefficient: <u>-2</u></p>	<p>2. $(-4p^2 - p + 9) + (p^2 + 3p - 1)$</p> <p>Standard Form: <u>$-3p^2 + 2p + 8$</u></p> <p>Degree: <u>2</u> Leading Coefficient: <u>-3</u></p>
<p>3. The measures of two sides of a triangle are given. If P is the perimeter, and $P = 10x + 5y$, find the measure of the third side. (<i>Perimeter = sum of all sides</i>)</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>$3x + 4y + (5x - y)$ $8x + 3y$ $10x + 5y + (8x + 3y) = 2x + 2y$</p> </div> <div style="width: 45%; text-align: center;">  </div> </div>	

T8-2: I can multiply polynomials using the distributive & double distributive method.

Write answers in standard form and always show ALL steps!

<p>1. $6t(2t - 3) - 5(2t^2 + 9t - 3)$</p> <p>$12t^2 - 18t - 10t^2 - 45t + 15$</p> <p>$2t^2 - 58t + 15$ D: 2 LC: 2</p>	<p>2. $-2(3m^3 + 5m + 6) + 3m(2m^2 + 3m + 1)$</p> <p>$-6m^3 - 10m - 12 + 6m^3 + 9m^2 + 3m$</p> <p>$9m^2 - 7m - 12$ D: 2 LC: 9</p>
---	---

Solve. Show all steps and verify your answer!

<p>3. $3(a + 2) + 5 = 2a + 4$</p> <p>$3a + 6 + 5 = 2a + 4$</p> <p>$3a + 11 = 2a + 4$</p> <p>$-2a - 11 \quad -2a \quad -11$</p> <p><u>$a = -7$</u></p>	<p>4. $2(4x + 2) - 8 = 4(x + 3)$</p> <p>$8x + 4 - 8 = 4x + 12$</p> <p>$8x - 4 = 4x + 12$</p> <p>$-4x + 16 \quad -4x \quad +4$</p> <p>$4x = 16$ <u>$x = 4$</u></p>
--	--

Find each product. Double Distribute.

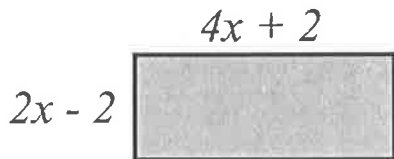
<p>5. $(4h - 2)(4h - 1)$</p> <p>$4h(4h - 1) - 2(4h - 1)$</p> <p>$16h^2 - 4h - 8h + 2$</p> <p>$16h^2 - 12h + 2$ D: 2 LC: 16</p>	<p>6. $(w + 4)(w^2 + 3w - 6)$</p> <p>$w(w^2 + 3w - 6) + 4(w^2 + 3w - 6)$</p> <p>$w^3 + 3w^2 - 6w + 4w^2 + 12w - 24$</p> <p>$w^3 + 7w^2 + 6w - 24$ D: 3 LC: 1</p>
---	---

T 8-3: I can multiply polynomials using FOIL method.

<p>1. $(n + 9)^2$</p> <p>$(n+9)(n+9)$</p> <p>$n^2 + 9n + 9n + 81$</p> <p>$n^2 + 18n + 81$ D: 2 LC: 1</p>	<p>2. $(2x - 8)^2$</p> <p>$(2x-8)(2x-8)$</p> <p>$4x^2 - 16x - 16x + 64$</p> <p>$4x^2 - 32x + 64$ D: 2 LC: 4</p>
<p>3. $(k + 13)(k - 13)$</p> <p>$k^2 - 13k + 13k - 169$</p> <p>$k^2 - 169$ D: 2 LC: 1</p>	<p>4. $(3x - 5)(3x + 5)$</p> <p>$9x^2 + 15x - 15x - 25$</p> <p>$9x^2 - 25$ D: 2 LC: 9</p>

Find an expression to represent the area of the shaded regions of the figures. ($Area = Base \cdot Height$)

5.

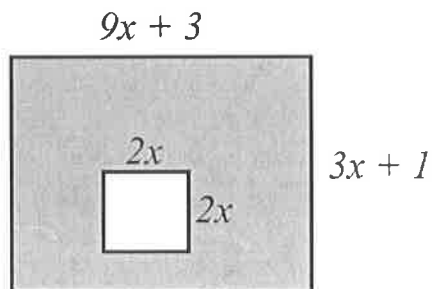


$(2x-2)(4x+2)$

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

$8x^2 - 4x - 4$

6.



$(9x+3)(3x+1) - (2x)(2x)$

$27x^2 + 9x + 9x + 3 - 4x^2$

$27x^2 + 18x + 3 - 4x^2$

$23x^2 + 18x + 3$

T 8-1: I can write polynomials in standard form, name leading coefficient, name degree and perform addition and subtraction on polynomials.

Section 8.1: Find each sum or difference.

1. $(4y + 5) + (-7y - 1)$

$-3y + 4$ D: 1
LC: -3

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

$-3x^2 - 2x$ D: 2
LC: -3

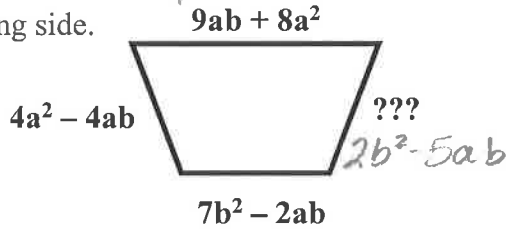
3. $(4k^2 + 8k + 2) + (2k + 3)$

$4k^2 + 6k - 1$ D: 2
LC: 4

4. $(x^2 - 3x + 1) + (x^3 + 7 + 12x)$

$9x - 6$ D: 1
LC: 9

5. Find the missing side.



Perimeter

$9b^2 - 2ab + 12a^2$

$(4a^2 - 4ab) + (9ab + 8a^2) + (7b^2 - 2ab)$
 $(9b^2 - 2ab + 12a^2) + (12a^2 + 3ab + 7b^2)$
 $2b^2 - 5ab$

6. The measure of the perimeter of a triangle is $37s + 42$. It is known that two of the sides of the triangle have measures of $14s + 16$ and $10s + 20$. Find the length of the third side.

$(14s + 16) + (10s + 20)$
 $(37s + 42) + (24s + 36)$
 $13s + 6$

Write each polynomial in standard form. Identify the leading coefficient.

8. $8x^2 - 15 + 5x^5$

$5x^5 + 8x^2 - 15$ D: 5
LC: 5

9. $10x - 7 + x^4 + 4x^3$

$x^4 + 4x^3 + 10x - 7$ D: 4
LC: 1

10. $13x^2 - 5 + 6x^3 - x$

$6x^3 + 13x^2 - x - 5$
D: 3
LC: 6

12. $4x + 2x^5 - 6x^3 + 2$

$2x^5 - 6x^3 + 4x + 2$
D: 5
LC: 2

T8-2: I can multiply polynomials using the distributive & double distributive method.

Section 8.2: Find each product and simplify.

1. $2h(-7h^2 - 4h)$

$-14h^3 - 8h^2$ D: 3
LC: 14

2. $6pq(3p^2 + 4q)$

$18p^3q + 24pq^2$ D: 4
LC: 18

3. $-\frac{1}{4}m(8m^2 + m - 7)$

$-2m^3 - \frac{1}{4}m^2 + \frac{7}{4}m$ D: 3
LC: -2

4. $-\frac{2}{3}n^2(-9n^2 + 3n + 6)$

$6n^4 - 2n^3 - 4n^2$ D: 4
LC: 6

5. $-2l(3l - 4) + 7l$

$-6l^2 + 8l + 7l$
 $-6l^2 + 15l$ D: 2
LC: -6

6. $5w(-7w + 3) + 2w(-2w^2 + 19w + 2)$

$-35w^2 + 15w - 4w^3 + 38w^2 + 4w$
 $-4w^3 + 3w^2 + 19w$ D: 3
LC: -4

Solve each equation.

6. $3(a+2)+5=2a+4$

$$3a+6+5=2a+4$$

$$3a+11=2a+4$$

$$\begin{array}{r} -2a \\ -11 \end{array} \quad \begin{array}{r} -2a \\ 11 \end{array}$$

$$\boxed{a=7}$$

7. $2(4x+2)-8=4(x+3)$

$$8x+4-8=4x+12$$

$$8x-4=4x+12$$

$$\begin{array}{r} -4x \\ -16 \end{array} \quad \begin{array}{r} -4x \\ 16 \end{array}$$

$$\boxed{4x=16} \quad \boxed{x=4}$$

8. $5(y+1)+2=4(y+2)-6$

$$5y+5+2=4y+8-6$$

$$5y+7=4y+2$$

$$\begin{array}{r} -4y \\ -7 \end{array} \quad \begin{array}{r} -4y \\ -7 \end{array}$$

$$\boxed{y=-5}$$

9. $4(b+6)=2(b+5)+2$

$$4b+24=2b+10+2$$

$$4b+24=2b+12$$

$$\begin{array}{r} -2b \\ -24 \end{array} \quad \begin{array}{r} -2b \\ -24 \end{array}$$

$$2b=-12$$

$$\boxed{b=-6}$$

T8-2 Double Distribute

(Section 8.3) Find each product.

1. $(m+4)(m+1)$

$$m(m+1)+4(m+1)$$

$$m^2+m+4m+4$$

$$m^2+5m+4$$

2. $(x+2)(x+2)$

$$x(x+2)+2(x+2)$$

$$x^2+2x+2x+4$$

$$x^2+4x+4$$

3. $(r+1)(r-2)$

$$r(r-2)+1(r-2)$$

$$r^2-2r+r-2$$

$$r^2-r-2$$

4. $(n-5)(n+1)$

$$n(n+1)-5(n+1)$$

$$n^2+n-5n-5$$

$$n^2-4n-5$$

5. $(4c+1)(2c+1)$

$$4c(2c+1)+1(2c+1)$$

$$8c^2+4c+2c+1$$

$$8c^2+6c+1$$

6. $(5a-2)(2a-3)$

$$5a(2a-3)-2(2a-3)$$

$$10a^2-15a-4a+6$$

$$10a^2-19a+6$$

7. $(x-y)(2x-y)$

$$x(2x-y)-y(2x-y)$$

$$2x^2-xy-2xy+y^2$$

$$2x^2-3xy+y^2$$

8. $(t+1)(t^2+2t+4)$

$$t(t^2+2t+4)+1(t^2+2t+4)$$

$$t^3+2t^2+4t+t^2+2t+4$$

$$t^3+3t^2+6t+4$$

T8-3: I can multiply polynomials using FOIL method.

Section 8.4: Find each product using FOIL.

1. $(x-10)(x-10)$

$$x^2-10x-10x+100$$

$$x^2-20x+100$$

2. $(r-11)(r-11)$

$$r^2-11r-11r+121$$

$$r^2-22r+121$$

3. $(p+7)(p+7)$

$$p^2+7p+7p+49$$

$$p^2+14p+49$$

6. $(2b+6)(2b-6)$

$$4b^2-12b+12b-36$$

$$4b^2-36$$

7. $(4j+2)(4j+2)$

$$16j^2+8j+8j+4$$

$$16j^2+16j+4$$

9. $(5w-4)(5w-4)$

$$25w^2-20w-20w+16$$

$$25w^2-40w+16$$

10. $(6a-7b)(6a+7b)$

$$36a^2-42ab+42ab-49b^2$$

$$36a^2-49b^2$$

11. $(8h+3)(8h-3)$

$$64h^2-24h+24h-9$$

$$64h^2-9$$

12. $(9x+2y^2)(9x+2y^2)$

$$81x^2+18xy^2+18xy^2+4y^4$$

$$81x^2+36xy^2+4y^4$$