

HW 5.3 SOL

October 14, 2020 8:57 AM

Math 9

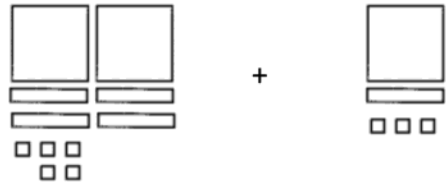
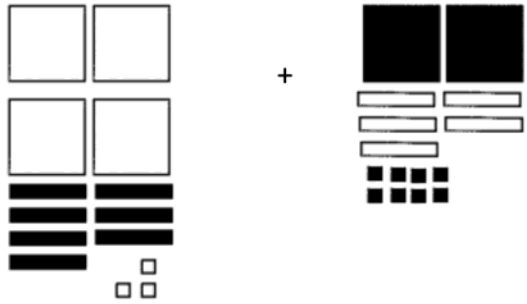
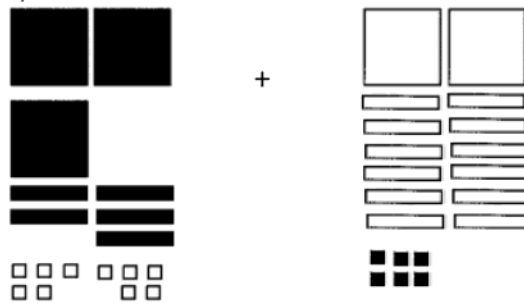
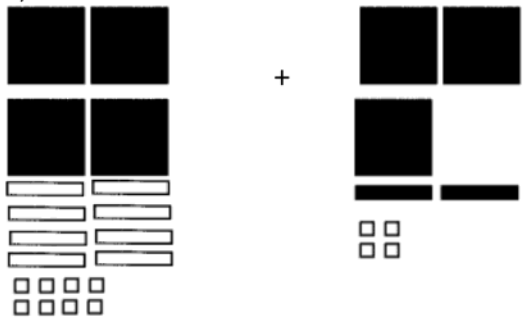
Chapter 5.3 – Adding Polynomials

Date: _____

Name: _____

Period: _____

1. Write the polynomial sum modelled by each set of tiles.

<p>a)</p>  <p style="text-align: center; color: red; font-size: 1.2em;">$3x^2 + 5x + 8$</p>	<p>b)</p>  <p style="text-align: center; color: red; font-size: 1.2em;">$= 2x^2 - 2x - 5$</p>
<p>c)</p>  <p style="text-align: center; color: red; font-size: 1.2em;">$-x^2 + 7x + 4$</p>	<p>d)</p>  <p style="text-align: center; color: red; font-size: 1.2em;">$7x^2 + 6x + 12$</p>

2. Add these polynomials.

<p>a)</p> $\begin{array}{r} 5x^2 - 3x + 8 \\ + 2x^2 + 7x - 10 \\ \hline \end{array}$ <p>$7x^2 + 4x - 2$</p>	<p>b)</p> $\begin{array}{r} 6x^2 - 4x - 17 \\ + -2x^2 - 5x + 10 \\ \hline \end{array}$ <p>$4x^2 - 9x - 7$</p>
<p>c)</p> $\begin{array}{r} -3x^2 - 12x + 28 \\ + 4x^2 + 7x - 15 \\ \hline \end{array}$ <p>$x^2 - 5x + 13$</p>	<p>d)</p> $\begin{array}{r} -7x^2 - 9x - 18 \\ + -3x^2 + 6x - 14 \\ \hline \end{array}$ <p>$-10x^2 - 3x - 32$</p>

3. Add.

<p>a) $(3x+5)+(8-7x+x^2)$</p> <p>$\cancel{3x} + 5 + 8 - \cancel{7x} + x^2$</p> <p>$= x^2 - 4x + 13.$</p>	<p>b) $(5x^2 - 8x - 12) + (-3x^2 + 4x - 13)$</p> <p>$= \cancel{5x^2} - \cancel{8x} - 12 - \cancel{3x^2} + \cancel{4x} - 13$</p> <p>$= -2x^2 - 4x - 25$</p>
<p>c) $(2x+15)+(2y-8)+(5x-9y)$</p> <p>$= \cancel{2x} + 15 + \cancel{2y} - 8 + \cancel{5x} - \cancel{9y}$</p> <p>$= 7x - 7y + 7$</p>	<p>d) $(7-8x^2+12x)+(5-21x+13x^2)$</p> <p>$= 7 - \cancel{8x^2} + \cancel{12x} + 5 - \cancel{21x} + \cancel{13x^2}$</p> <p>$= 5x^2 - 9x + 12$</p>
<p>e) $(24x-12x^2+1)+(15-20x-3x^2)$</p>	<p>f) $(5x-2x^2)+(9x^2-7)+(15-6x^2+18)$</p>

g) $(15xy + 16x^2y - 10xy^2) + (9x^2y - 11xy - 8xy^2)$

$$\underline{25x^2y} - \underline{18xy^2} + \underline{4xy}$$

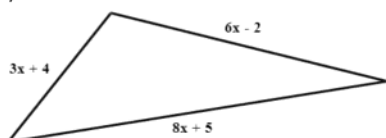
h) $(14x^2y^2 - 16x^2y^2 + 20x^3y^2) + (4x^2y^3 - 6x^2y^2 + 2x^3y^2) + (10xy^2 - x^2y^2)$

$$\underline{14x^2y^2 - 6x^2y^2 - x^2y^2} - \underline{16xy^2 + 10xy^2} + \underline{20x^3y^2 + 2x^3y^2} + \underline{4x^2y^3}$$

$$7x^2y^2 - 6xy^2 + 22x^3y^2 + 4x^2y^3 //$$

4. For each shape below, write the perimeter.

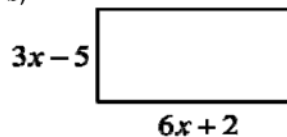
a) A



$$= (3x+4) + (6x-2) + (8x+5)$$

$$= 17x + 7 //$$

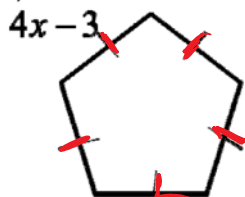
b)



$$= 2[3x-5 + 6x+2]$$

$$= 2[9x-3] = 18x - 6 //$$

c)



$$P = 5(4x-3)$$

$$= 20x - 15 //$$

d)

