**Grade 9 Math May 13-19**

Welcome to Week 6, this week all Math 9 classes will continue learning about Polynomials. Review the notes pages before completing the practice questions.

**READ ALL OF THE INFORMATION BELOW BEFORE STARTING**

**Learning Intentions:**

* *Students will be able to add and subtract polynomials*
* *Students will be able to use algebra tiles to represent polynomials*

**Assignment Instructions:**

1. Follow the instructions and examples from Polynomials Part 2 - Adding and Subtracting Polynomials Notes (pg. 4-7).

* Remember to always **show your work** so that the reader understands how you reached the answer you did.

1. Complete a minimum of the **odd numbered** questions from Polynomials Part 2 - Adding and Subtracting Polynomials Practice Questions (pg. 8-12).

* Complete all the questions for an opportunity to receive an extending assessment and improve your grade
* Supplement your learning from the instruction and examples below
* Try the “extending your learning” questions for an opportunity to improve your grade and improve your skills.Communicate your progress back to your teacher

**Office Hours: May 13 to 19 (via ZOOM):**

If you need help, join the office hours. .

[***https://zoom.us/join***](https://zoom.us/join).

Time - 2:00pm to 3:00pm - Mrs. Switzer

* Thursday, May 14

Meeting ID: 925 1292 2665

Password: math9

Time – 11am-12pm

* Tuesday, May 19 – Mrs. Barton
* Meeting ID: 965 5141 6172
* Password: 8ydUnU

**Submitting your work:**

Please submit completed work by **Tuesday, May 19, 2020** via the preferred or discussed method of your teacher.

Mrs. Switzer’s class please submit via Teams if possible

Mrs. Barton’s class please submit via email to [sbarton@sd79.bc.ca](mailto:sbarton@sd79.bc.ca)

Mr. Crerar’s classes please submit via email to [bcrerar@sd79.bc.ca](mailto:bcrerar@sd79.bc.ca). Only do the odd numbered questions 1 - 25.

**Criteria / Rubric:**

This assignment will be assessed by your teacher using the rubric below. In addition, you should use the rubric to self-evaluate by including a statement such as this “In this assignment, I feel that I am proficient, because\_\_\_\_\_\_”. Also include how long it took you to complete the assignment.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Proficiency Scale** | **Extending** | **Proficient** | **Developing** | **Emerging** |
| **Description** | The students work **meets** the objective; it is clear, with **few or no errors** and demonstrates a **sophisticated** understanding of the concepts and competencies relevant to the learning intentions. | The students work **almost meets** the objective; it has **some errors** but demonstrates a **good** understanding of the concepts and competencies relevant to the learning intentions.. | The students work is **in progress**; it has **some errors** and demonstrates a **partial** understanding of the concepts and competencies relevant to the learning intentions. | The students work **does not meet** the objectives; it has **frequent errors** and demonstrates **minimal or no** understanding of the concepts and competencies relevant to the learning intentions.. |
| **Phrase** | "I could teach this." | "I have a good understanding." | " I get some of it." | "I don't get it." |

Teacher comments:

Your teacher will review your work and provide feedback as quickly as possible.

Supplementary Instruction and Examples:

Below are some great resources that show examples of the concepts covered this week. If you need some extra help start with the Khan Academy video. Show your teacher evidence (eg. written summary or practice questions) that you completed any of the suggested questions to get credit for extra work.

1. Watch this Khan Academyvideo about adding polynomials (<https://www.khanacademy.org/math/algebra2/x2ec2f6f830c9fb89:poly-arithmetic/x2ec2f6f830c9fb89:poly-add-sub/v/adding-and-subtracting-polynomials-1?modal=1>), and this one about subtracting polynomials

(<https://www.khanacademy.org/math/algebra2/x2ec2f6f830c9fb89:poly-arithmetic/x2ec2f6f830c9fb89:poly-add-sub/v/subtracting-polynomials?modal=1>)

1. Try these 4 practice questions at Khan Academy (<https://www.khanacademy.org/math/algebra2/x2ec2f6f830c9fb89:poly-arithmetic/x2ec2f6f830c9fb89:poly-arithmetic/x2ec2f6f830c9fb89:poly-add-sub/e/add---subtract-polynomials-challenge?modal=1>)
2. This page on Math is Fun explains how to add and subtract polynomials. (<https://www.mathsisfun.com/algebra/polynomials-adding-subtracting.html>)
3. Read through [this page](https://www.mathplanet.com/education/algebra-1/factoring-and-polynomials/monomials-and-polynomials) on mathplanet, paying special attention to the video example at the bottom (this is the same as last week, but focus on the section about adding and subtracting) (<https://www.mathplanet.com/education/algebra-1/factoring-and-polynomials/monomials-and-polynomials>).
4. Look at the examples on Purple Math for [Combining Like Terms](https://www.purplemath.com/modules/polydefs2.htm). (<https://www.purplemath.com/modules/polydefs2.htm>) (this is the same page we asked you to look at last week. This time, focus on the examples lower down the page with the parentheses.
5. Check out this page on Lumen Learning again. This time, scroll down and read the section on adding and subtracting polynomials. Do the Try It question provided on that page (with pen and paper) and check answers. Click "try another question" until you are confident in your abilities.

(<https://courses.lumenlearning.com/collegealgebra2017/chapter/introduction-polynomials/>)

Extending Your Learning (Optional):

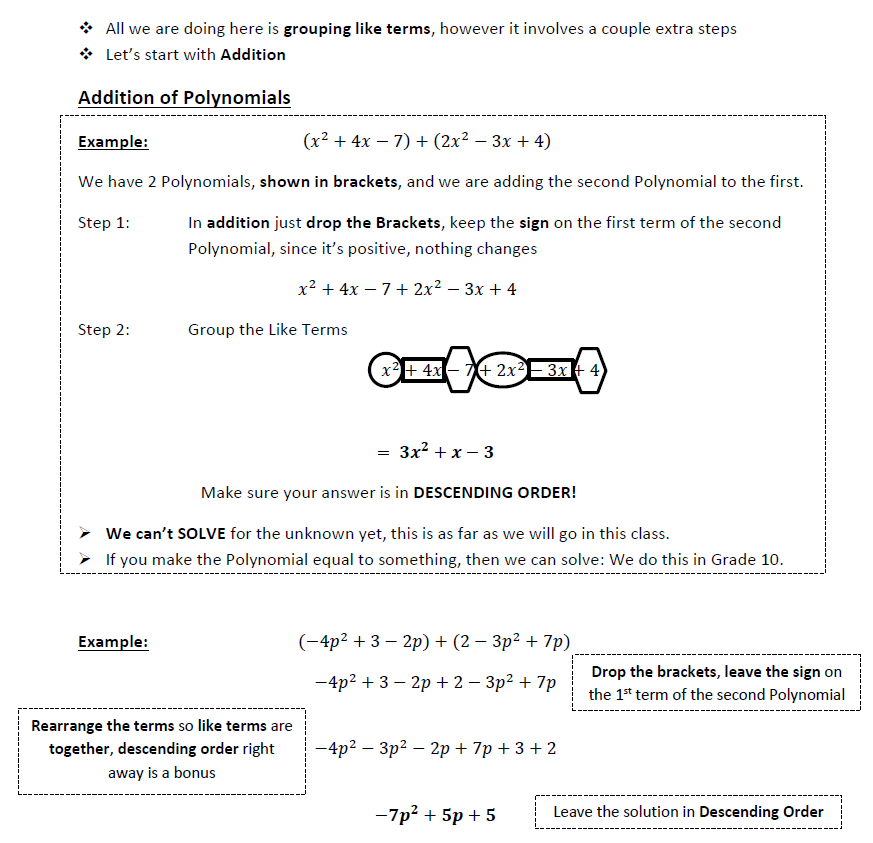
Any operations with polynomials we do using integers can be done with both positive and negative integers, along with fractions and decimals. All the same rules still apply, but unfortunately these types of questions are very difficult to attempt with tiles. Try these challenge questions:

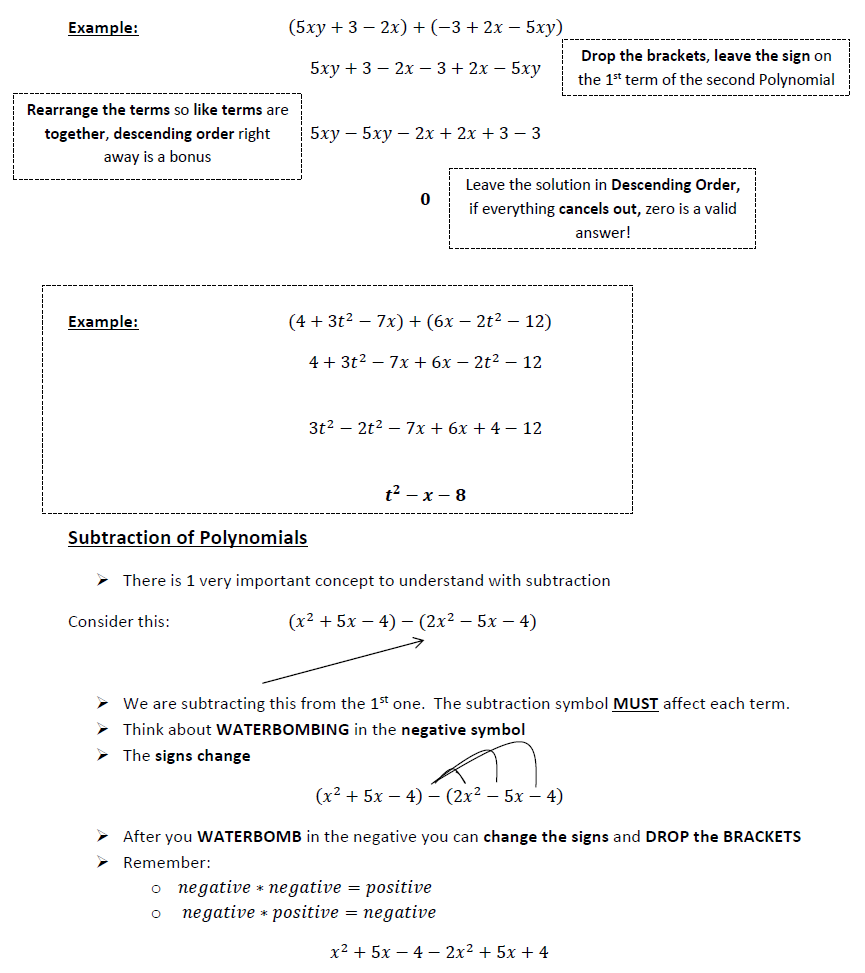
1. (-3.5a + - 4) + (5- 7 + a )
2. ( + 1.5) - (-6+ 0.625 - 4b)
3. (3c - 5.2d + 8 + (0.75d - 5.5- 3.8d)
4. (4+ 5+ 6f + 7) - (6- 5 + 4f)

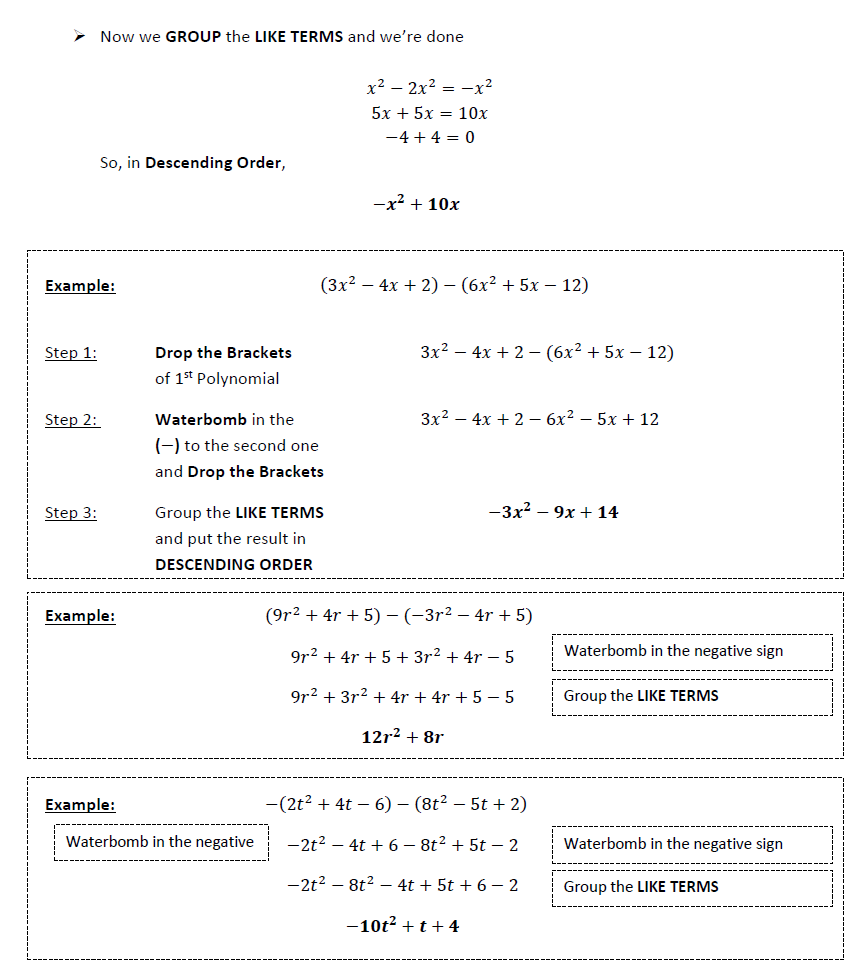
**NOTES**

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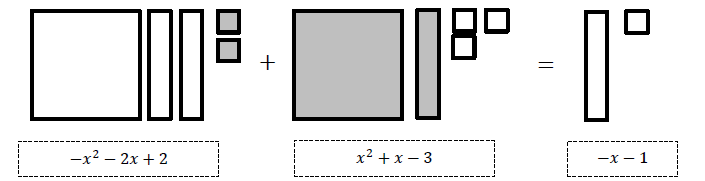
**Polynomials Part 2 - Addition and Subtraction of Polynomials**

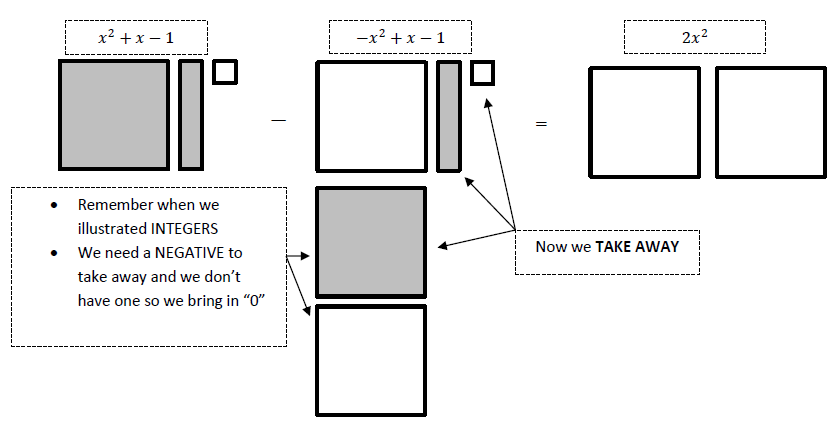
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**Using Algebra Tiles**

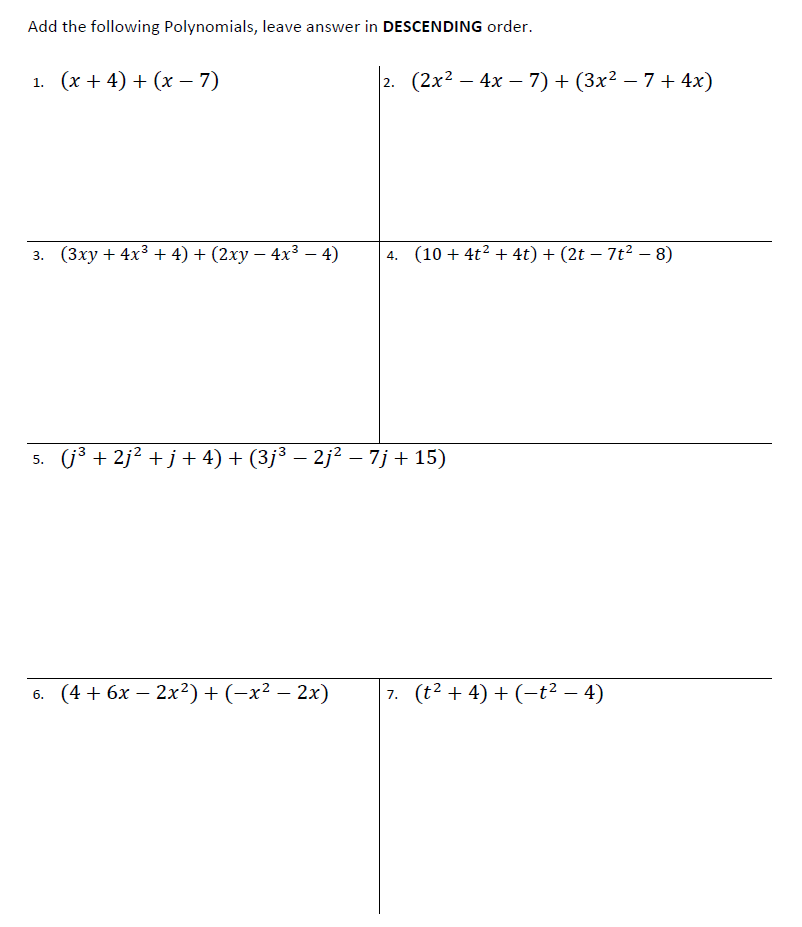
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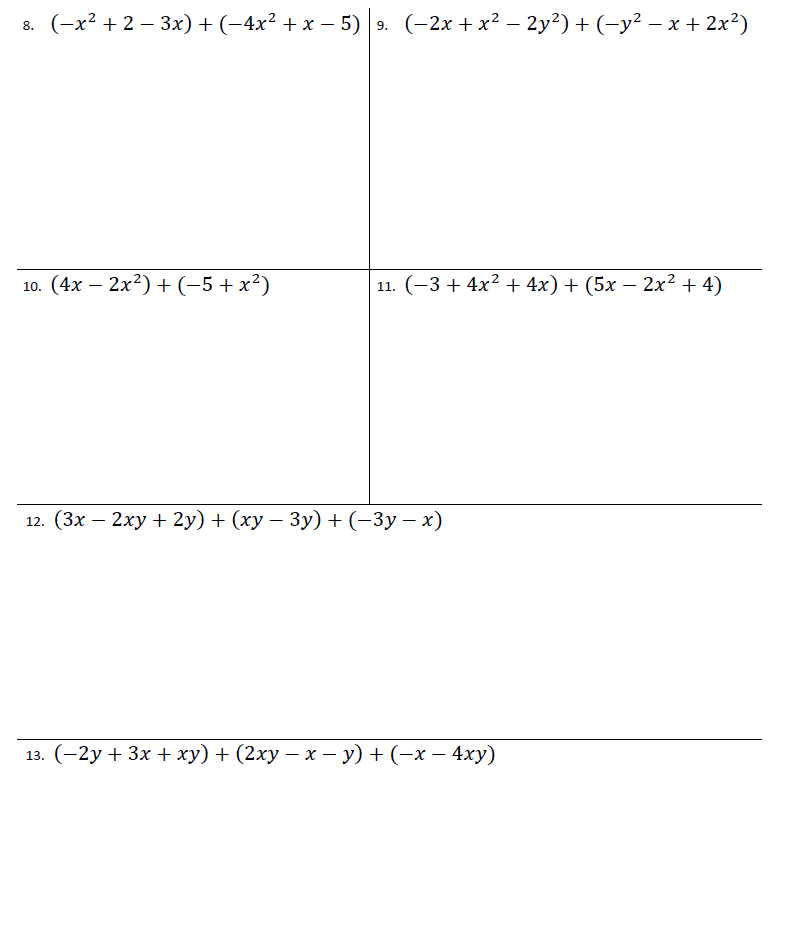
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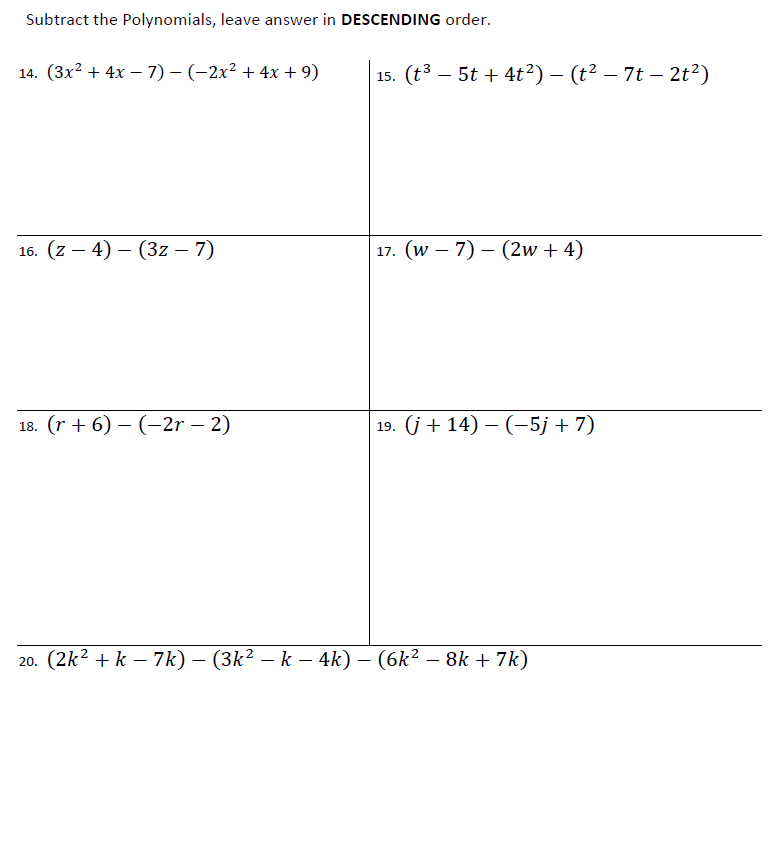
**PRACTICE QUESTIONS**

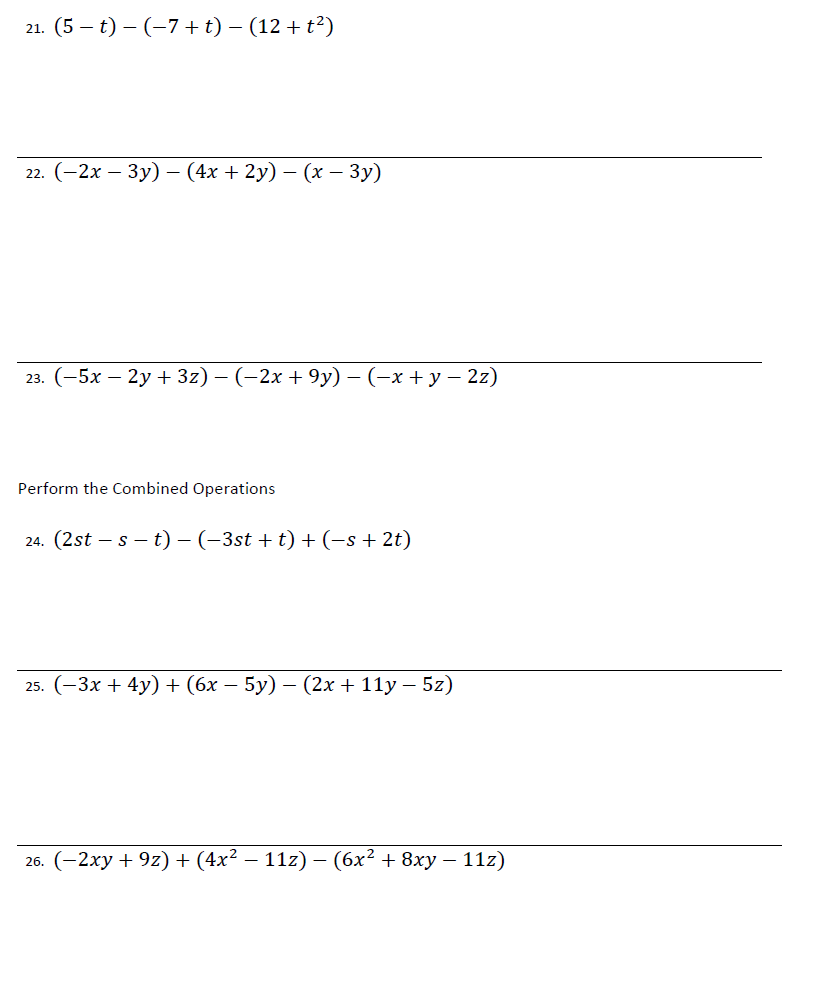
**Grade 9 Math May 13 - 19**

**Polynomials Part 2 - Addition and Subtraction of Polynomials**

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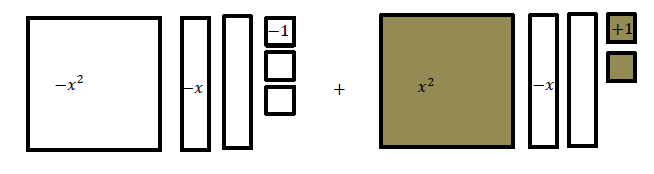
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Show the algebra tiles as written terms (eg. 2x2), then solve. Show your answer as algebra tiles and as a written term.

27. Add the Polynomial, leave answer in **DESCENDING** order.



28. Subtract the Polynomial, leave answer in **DESCENDING** order. 