

# Sample Pages Algebra I TE

## TEKS-tivity



**BI** Polynomial Operations  
Number and Algebraic Methods  
Pages 1 - 5 in SE

**Texas Essential Knowledge & Skills**  
**Category 1**  
The student will demonstrate an understanding of how to use algebraic methods to manipulate numbers, expressions, and equations.

**Student Expectations**  
**Number and algebraic methods.** The student applies the mathematical process standards and algebraic methods to rewrite in equivalent forms and perform operations on polynomial expressions.

**TEKS** Student is expected to...  
add and subtract polynomials of degree one and degree two (SS)

**Unit TEKS**  
Extending Operations to Polynomial Expressions and Complex Numbers

**A.10A**  
**A.10B**  
**A.10C**  
**A.10D**  
**A.10E**  
**A.10F**

**Unit 1 - Polynom**  
This unit contains six readiness standard.  
The focus of this unit polynomials. Student polynomials. Student the difference of two to realize the TEKS degree two.  
Throughout this unit polynomial operation

Algebra I DSL TEKS-tivity Book

**TN** Polynomial Operations  
Number and Algebraic Methods  
Unit 1: A.10A, A.10B, A.10C, A.10D, A.10E, A.10F

**A** Activity 1 A.10A - SE p. 1

**Directions:**  
1 Students should work this activity individually (SE p. 1).  
2 As students are working, ask them the following questions: *Sample answers are in italics.*

a What is a polynomial?  
*A polynomial is a sum of two or more monomials.*

b What is a term of a polynomial?  
*A term is one of the monomials.*

c What must be true about terms in a polynomial?  
*Terms can only be added or subtracted if they have the same variables with the same exponents.*

d What do you need to know to add or subtract polynomials?  
*I need to remember to combine like terms.*

3 After finishing the activity, have the students complete the Ticket Out the Door #1.

**A** Polynomial Operations  
Number and Algebraic Methods  
TEKS A.10B Supporting Standard

**Activity 2: A.10B**

$(x+2)(x-2)$	$(4x-1)^2$	$(6x+1)(x-2)$	$(x+1)(x-1)$
$(5x-4)^2$	$(x+2)(x-6)$	$(5x+2)(2x+3)$	$(x^2-1)(x-5)$
$x^2+6x+9$	$x^2-10x+24$	$6x^2+13x+6$	$x^2-14x+24$
$(x+3)^2$	$(x-3)(x+6)$	$(x+2)(x+5)$	$(x+2)(x-9)$
$(x-2)(x-9)$	$4x^2-25$	$x^2+4x+3$	$(x+3)(x+1)$
$(x+2)(x+5)$	$(2x-5)(2x+5)$	$(2x-5)(2x+1)$	$25x^2+20x+4$

**T** Polynomial Operations  
Number and Algebraic Methods  
Unit 1: A.10A, A.10B, A.10C, A.10D, A.10E, A.10F

**Ticket Out the Door**

**Ticket #1**  
What is a polynomial?

What is a polynomial?

**IA** Polynomial Operations  
Number and Algebraic Methods  
Unit 1: A.10A, A.10B, A.10C, A.10D, A.10E, A.10F

**TEKS A.10A Supporting Standard**  
add and subtract polynomials of degree one and degree two

**ITEM 7** What is the perimeter of the figure below? (A.10A, SS, RCI)

**Answer Analysis**

A
B
C
D

How did you determine the perimeter?

**TEKS A.10C Supporting Standard**  
determine the quotient of a polynomial of degree one and polynomial of degree two when divided by a polynomial of degree one and polynomial of degree two when the degree of the divisor does not exceed the degree of the dividend

**ITEM 8** Which of the following is quotient to  $5x^2 + 13x - 6 \div (x + 3)$ ? (A.10C, SS, RCI)

**Answer Analysis**

F
G
H
J

Describe the process you used to find the quotient.

- Unit Overview and Teacher Notes
- Extensive teacher notes for each activity and unit
- Facilitating questions provide a focus for each activity
- Tickets out the door used for quick formative assessment