

MATH TEKS TEST REVIEW



a complete 10+ day test prep unit

comprehensive, ready-to-go test review unit

MATH TEKS REVIEW INSTRUCTIONS AND IMPLEMENTATION

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The following items have been included in the Math TEKS Review pack.

TOPIC	STANDARDS	ACTIVITY
Equations and Inequalities	A.5A, A.5B, A.12E	He Said, She Said
Properties of Functions	A.2A, A.6A, A.12A, A.12B	Task Cards
Linear Functions	A.2B, A.2C, A.2H, A.3A, A.3B, A.3C, A.3D	Scavenger Hunt
Applying Linear Functions	A.2D, A.2E, A.2F, A.2G, A.3E, A.4A, A.4B, A.4C, A.12C, A.12D	Stations
Systems	A.2I, A.3F, A.3G, A.3H, A.5C	Matching Activity
Exponents and Polynomials	A.10A, A.10B, A.10C, A.10D, A.10F, A.11B	Scavenger Hunt
Factoring Polynomials	A.10B, A.10D, A.10E, A.10F	Cut and Paste
Quadratic Functions	A.6A, A.6B, A.7A, A.7C, A.8B	Find It and Fix It
Solving Quadratic Equations	A.6C, A.7B, A.8A, A.11A	Puzzle Train
Exponential Functions	A.9A, A.9B, A.9C, A.9D, A.9E, A.12C, A.12D	Stations

Additionally, the same content has been formatted for easier printing by placing all of the materials in one file. For example, all of the quizzes together, all of the activities together, all of the warm-ups together, etc.

Activities Only.pdf	<input checked="" type="checkbox"/>	Ye
Cheat Sheets Only.pdf	<input checked="" type="checkbox"/>	Ye
Quick Checks Only.pdf	<input checked="" type="checkbox"/>	Ye
Teacher Guides Only.pdf	<input checked="" type="checkbox"/>	Ye
Warm-Ups Only.pdf	<input checked="" type="checkbox"/>	Ye

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MATH TEKS TEST REVIEW



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FACTORING POLYNOMIALS TEACHER GUIDE

STANDARDS

READINESS

A.10E factor, if possible, trinomials with real factors in the form $ax^2 + bx + c$, including perfect square trinomials of degree two

SUPPORTING

A.10B multiply polynomials of degree one and degree two

A.10D rewrite polynomial expressions of degree one and degree two in equivalent forms using the distributive property

A.10F decide if a binomial can be written as the difference of two squares and, if possible, use the structure of a difference of two squares to rewrite the binomial

VOCABULARY & KEYWORDS

difference of squares: a polynomial of the form $a^2 - b^2$ (a squared value subtracted from another squared value)

perfect square trinomial: a trinomial where the first and third terms are perfect squares, and the middle term is twice the product of the square roots of the first and third terms ($a^2 + 2ab + b^2$); a result of squaring a binomial

COMMON MISTAKES AND MISCONCEPTIONS

- Integer rules are very crucial when factoring polynomials and students may struggle to use them fluently.
- Students may try to factor a difference of squares by simply taking the square roots of each term. Example: Factoring $x^2 - 4$ and getting $(x - 2)^2$
- Students may try to apply the same steps for factoring $x^2 + bx + c$ to polynomials where $a \neq 1$

teacher guides includes:



standards



vocabulary



misconceptions

FACTORING POLYNOMIALS WARM-UP

Name _____
Date _____ Pd _____

1. Mrs. Ross asked her students to write a polynomial that can be simplified by dividing out the greatest common factor. Determine which student(s) correctly completed the task and then factor the polynomial(s).

SERGIO

$$7x^2 - 49x$$

MAGGIE

$$14x^2 - 32x + 4$$

2. Factor the polynomial shown below.

$$6x^2 - 5x - 4$$

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2 warm-up
questions
per topic



FACTORING POLYNOMIALS WARM-UP

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MATH TEKS TEST REVIEW



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cheat sheets cover
key concepts

FACTORIZING POLYNOMIALS
CHEAT SHEET - A

Name _____
Date _____ Pd _____

factoring by gcf

- Find the **GREATEST** common factor that divides into each term and **DIVIDE**

EX: Factor $15x^2 + 10x$

- The GCF is **5x**, so **DIVIDE** each term by **5x**:

3x	2
5x	$15x^2$ $10x$

SOLUTION: $5x(3x + 2)$

- When factoring a polynomial of the form $x^2 + bx + c$, find two factors with a product of **c** and a sum of **b**.

EX: Factor $x^2 + 5x + 6$

FACTORS	SUM
1 · 6	7
2 · 3	5

SOLUTION: $(x + 2)(x + 3)$

• For $ax^2 + bx + c$, we can use **GROUPING**

STEP 1: Find integers with a sum of **b** and a product of **c**

STEP 2: Rewrite the middle term

STEP 3: Factor out the GCF

STEP 4: Rewrite

factoring
 $ax^2 + bx + c$

factoring special cases

- If a polynomial begins as a **PERFECT SQUARE** or a **DIFFERENCE OF SQUARES**, its factors are

PERFECT SQUARE TRINOMIALS	$a^2 + 2ab + b^2$
	$a^2 - 2ab + b^2$
DIFFERENCE OF SQUARES	$a^2 - b^2$

FACTORIZING POLYNOMIALS
CHEAT SHEET - B

Name _____
Date _____ Pd _____

factoring by gcf

- Find the _____ common factor that divides into each term and _____

EX: Factor $15x^2 + 10x$

- The GCF is _____, so _____ each term by _____

	$15x^2$ $10x$
--	-----------------

SOLUTION: _____

- For _____, we can use _____

STEP 1: Find integers with a sum of _____ and a product of _____

STEP 2: Rewrite the middle term

STEP 3: Factor out the GCF

STEP 4: Rewrite

factoring
 $ax^2 + bx + c$

factoring special cases

- If a polynomial begins as a _____ or a _____, its factors are shown below:

PERFECT SQUARE TRINOMIALS	$a^2 + 2ab + b^2$
	$a^2 - 2ab + b^2$
DIFFERENCE OF SQUARES	$a^2 - b^2$

FACTORIZING POLYNOMIALS
CHEAT SHEET - C

Name _____
Date _____ Pd _____

factoring by gcf

factoring
 $ax^2 + bx + c$

factoring special cases

factoring checklist

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3 scaffolded
versions



MATH TEKS TEST REVIEW



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assessments with 8-10 questions

FACTORING POLYNOMIALS
QUICK CHECK

Name _____
Date _____ Pd _____

1. Which of the following is an example of a difference of squares?

I. $36x^2 + 81$
II. $4x^2 - 64x - 36$
III. $25c^2 - 144$

A. I only
B. II only
C. III only
D. II and III

2. Gi'shon needs to complete the expressions below to factor $x^2 + x - 56$. Which of the following must be true?

(x ____)(x ____)

F. Both expressions will include subtraction.
G. The sum of the values in the blanks should be 1.
H. The product of the values in the blanks should be 56.
J. The values in the blanks will be the same number but opposite signs.

3. Which function is equivalent to $g(x) = 6x^2 - 17x + 12$?


A. $g(x) = (2x - 3)(3x - 4)$
B. $g(x) = (2x - 3)(3x + 4)$
C. $g(x) = (6x - 1)(x - 12)$
D. $g(x) = (6x + 1)(x - 12)$

4. A coffee shop has a rectangular metal sign with an area of $x^2 + 15x + 44$ square inches. Which following expressions could represent the length of the sign?

F. $x + 22$ inches
G. $x - 11$ inches
H. $x - 4$ inches
J. $x + 11$ inches

1. (A) (B) (C) (D)
2. (F) (G) (H) (J)
3. (A) (B) (C) (D)
4. (F) (G) (H) (J)
5. (A) (B) (C) (D)
6. (F) (G) (H) (J)
7. (A) (B) (C) (D)
8. (F) (G) (H) (J)
9. (A) (B) (C) (D)
10. Use the grid below.

+	-	0	.	/	<	>													
1	2	3	4	5	6	7	8	9	0	.	/	<	>						



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- ✓ multiple choice
- ✓ griddable
- ✓ Google Forms™ version included

FACTORING POLYNOMIALS
ANSWER KEYS

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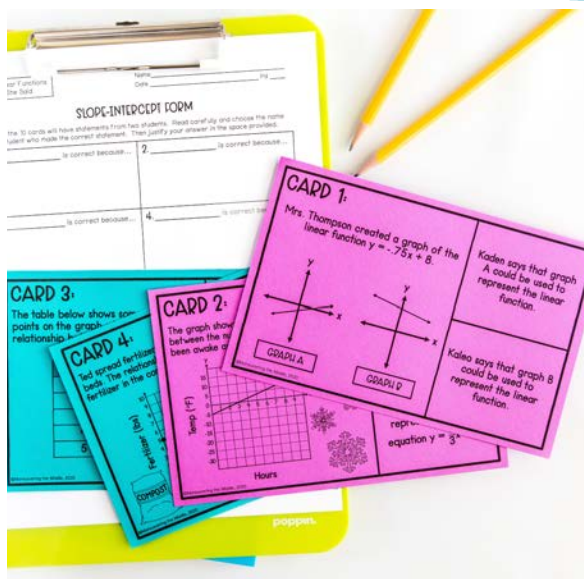
answer keys included 

MATH TEKS TEST REVIEW



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10 easy-to-prep activities



he said, she said
error analysis activity



scavenger hunt
great for partner work



task cards
variety of uses



puzzle train
make math hands on

he said, she said – task cards – scavenger hunt – stations
matching activity – cut and paste – find it, fix it – puzzle train

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