

# 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
Numerical Representations	8.2A, 8.2B, 8.2C, 8.2D	Stations
Functions and Slope	8.4A, 8.4B, 8.4C, 8.5G	Spin to Ten
Linear Relationships	8.4C, 8.5A, 8.5B, 8.5E, 8.5F, 8.5H, 8.5I	Four Corners
Equations and Inequalities	8.8A, 8.8B, 8.8C, 8.9A	Scavenger Hunt
Angle Relationships	8.8A, 8.8C, 8.8D	Cut and Paste
Pythagorean Theorem	8.6C, 8.7C, 8.7D	Task Cards
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Scatter Plots and Data	8.5C, 8.5D, 8.11A, 8.11B	He Said, She Said
Personal Financial Literacy	8.12A, 8.12C, 8.12D, 8.12G	Scavenger Hunt

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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## EQUATIONS AND INEQUALITIES TEACHER GUIDE

### STANDARDS

#### READINESS

**8.8C** Model and solve one-variable equations with variables on both sides of the equal sign that represent mathematical and real-world problems using rational number coefficients and constants

#### SUPPORTING

**8.8A** Write one-variable equations or inequalities with variables on both sides that represent problems using rational number coefficients and constants

**8.8B** Write a corresponding real-world problem when given a one-variable equation or inequality with variables on both sides of the equal sign using rational number coefficients and constants

**8.9A** Identify and verify the values of  $x$  and  $y$  that simultaneously satisfy two linear equations in the form  $y = mx + b$  from the intersections of the graphed equations

### VOCABULARY & KEYWORDS

**variable:** a symbol, such as  $x$ , used to represent an unknown value

**coefficient:** the number in front of a variable (multiplying the variable)

**constant:** a fixed value, or a number on its own

### COMMON MISTAKES AND MISCONCEPTIONS

- With multi-step equations, students may forget details such as negative signs.
- When solving an equation with a negative coefficient, students may see the negative sign and want to add the coefficient rather than divide by the negative coefficient.
- Students may have difficulty choosing the correct inequality sign when writing inequalities.
- When solving an equation with like terms on the same side of the equal sign, students may try to "undo" the operations rather than combine like terms.

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teacher guides  
includes:



standards



vocabulary



misconceptions

## EQUATIONS AND INEQUALITIES WARM-UP

Name \_\_\_\_\_  
Date \_\_\_\_\_ Pd \_\_\_\_\_

1. Kia's plant is  $8\frac{1}{5}$  inches tall and is growing  $\frac{2}{3}$  inch each week. Lyric's plant is  $10\frac{7}{10}$  inches tall and is growing  $\frac{1}{8}$  inch each week. Write and solve an equation to find how many weeks it will take for the height of the two plants to be the same.

Equation: \_\_\_\_\_

Solution: \_\_\_\_\_

2. Trina sells handmade vases for \$24.50 each. Each vase costs her \$4.25 to make, and she pays \$162 for a booth at a craft fair where she can sell her vases. Write and solve an inequality to determine how many vases she must sell at the craft fair in order to make a profit.

Equation: \_\_\_\_\_

Solution: \_\_\_\_\_

2 warm-up  
questions  
per topic



## EQUATIONS AND INEQUALITIES WARM-UP

Name \_\_\_\_\_  
Date \_\_\_\_\_ Pd \_\_\_\_\_

1. Kia's plant is  $8\frac{1}{5}$  inches tall and is growing  $\frac{2}{3}$  inch each week. Lyric's plant is  $10\frac{7}{10}$  inches tall and is growing  $\frac{1}{8}$  inch each week. Write and solve an equation to find how many weeks it will take for the height of the two plants to be the same.

Equation: \_\_\_\_\_

Solution: \_\_\_\_\_

2. Trina sells handmade vases for \$24.50 each. Each vase costs her \$4.25 to make, and she pays \$162 for a booth at a craft fair where she can sell her vases. Write and solve an inequality to determine how many vases she must sell at the craft fair in order to make a profit.

Equation: \_\_\_\_\_

Solution: \_\_\_\_\_

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cheat sheets cover  
key concepts

**EQUATIONS AND INEQUALITIES**  
CHEAT SHEET - A

Name \_\_\_\_\_  
Date \_\_\_\_\_ Pd \_\_\_\_\_

**Parts of an equation**

$-12x + 4 = 40$

COEFFICIENT      VARIABLE      CONSTANT

COEFFICIENT: the number in front of a variable (multiplying the variable)  
CONSTANT: a fixed value, or a number on its own  
VARIABLE: a letter used to represent an unknown value

**INEQUALITY SIGNS**

<	Less than Below Under Fewer than Smaller than Shorter than	>	Greater than Above Over More than Taller
≤	Less than or equal to At most Maximum Not greater than No more than	≥	Greater than or equal to At least Minimum Not less than No fewer than

**STEPS TO SOLVE:**

- Combine **LIKE TERMS** if necessary
- Collect **VARIABLES** on the same of the equal sign
- Collect **CONSTANTS** on the same side of the equal sign
- Remove the **COEFFICIENT** with inverse operations

Check your answer by **PLUGGING IT IN!**

Variables on both sides

**EQUATIONS AND INEQUALITIES**  
CHEAT SHEET - B

Name \_\_\_\_\_  
Date \_\_\_\_\_ Pd \_\_\_\_\_

**Parts of an equation**

$-12x + 4 = 40$

COEFFICIENT: the number in front of a variable (multiplying the variable)  
CONSTANT: a fixed value, or a number on its own  
VARIABLE: a letter used to represent an unknown value

**INEQUALITY SIGNS**

<	Less than Below Under Fewer than Smaller than Shorter than	>	Greater than Above Over More than Taller
≤	Less than or equal to At most Maximum Not greater than No more than	≥	Greater than or equal to At least Minimum Not less than No fewer than

**STEPS TO SOLVE:**

- Combine \_\_\_\_\_ **TERMS** if necessary
- Collect \_\_\_\_\_ on the same of the equal sign
- Collect \_\_\_\_\_ on the same side of the equal sign

Variables on both sides

**EQUATIONS AND INEQUALITIES**  
CHEAT SHEET - C

Name \_\_\_\_\_  
Date \_\_\_\_\_ Pd \_\_\_\_\_

**Parts of an equation**

Variables on both sides

**INEQUALITY SIGNS**

<	Less than Below Under Fewer than Smaller than Shorter than	>	Greater than Above Over More than Taller
≤	Less than or equal to At most Maximum Not greater than No more than	≥	Greater than or equal to At least Minimum Not less than No fewer than

Intersecting lines

3 scaffolded versions



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## assessments with 8-10 questions

**EQUATIONS AND INEQUALITIES** Name \_\_\_\_\_  
QUICK CHECK Date \_\_\_\_\_ Pd \_\_\_\_\_

1. Gym A charges a registration fee of \$75, plus \$35.75 per month for members. Gym B charges a registration fee of \$164, plus \$17.95 for members. After how many months would the total cost at Gym A and Gym B be the same for members?

A. 10 months  
B. 5 months  
C. 7 months  
D. The total cost will never be the same.

2. The graph below shows the number of hours that Rue and Zoe have been working at their jobs, as well as how much money they've earned. Which is a correct conclusion about the information shown in the graph?

F. After 24 hours, Rue and Zoe will have earned the same amount of money.  
G. After 4 hours, Zoe will have earned \$12 more than Rue.  
H. After 4 hours, Rue will have earned \$12 more than Zoe.  
J. After 4 hours, Rue and Zoe will have earned the same amount of money.

3. Barrett is ordering t-shirts for his school's student council. Company D charges a \$30 design fee plus \$6.25 per t-shirt. Company E charges a \$12 design fee plus \$9.75 per t-shirt. Which inequality can be used to find  $x$ , the minimum number of t-shirts that can be ordered so that the total cost with Company D is less than the total cost with Company E?

A.  $6.25x + 30 > 9.75x + 12$   
B.  $6.25x + 30 < 9.75x + 12$   
C.  $6.25 + 30x > 9.75 + 12x$   
D.  $6.25 + 30x < 9.75 + 12x$

4. Identify the equation modeled below, and then find its solution.

F. Equation:  $4x + 4 = -x + 1$ ; Solution:  $x = -0.6$   
G. Equation:  $-4x + 4 = -x - 1$ ; Solution:  $x = 1.\bar{6}$   
H. Equation:  $4x - 4 = -x - 1$ ; Solution:  $x = 0.6$

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

## EQUATIONS AND INEQUALITIES ANSWER KEYS

answer keys  
included



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## 10 easy-to-prep activities



**he said, she said**  
error analysis activity



**scavenger hunt**  
great for partner work



**cut and paste**  
variety of uses



**puzzle activity**  
make math hands on

stations – spin to ten – four corners – scavenger hunt – cut and paste – task cards – domino train – find it, fix it – he said, she said