

GED Math Test-Taking Strategies & Calculator Skills

Part 3

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Hardt2heart Adult Education Services





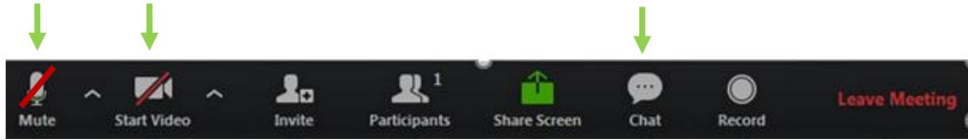
Adora Beard
Director of State Relationships,
Community Engagement & Culture



Kellie Blair Hardt
Hardt2heart Adult
Education Services



Before We Get Started



During the webinar, **please:**

1. Keep your sound and video **muted**. This will limit background noise.
2. Ask questions using the **chat function**.
3. Keep in mind that the session is being **recorded** for future viewing.
4. The session and all associated materials will be posted on the GED website at

<https://www.ged.com/educators-admins/professional-development.html>

Session Objective

Explore practical, GED-focused strategies for teaching linear equations in slope-intercept form—while addressing common learner misconceptions, missed points, and cognitive barriers.

By the end of our session, you'll have strategies you can use immediately with your learners to help them recognize, interpret, and work with $y = mx + b$ more confidently.

Whether you're new to GED Math or have been teaching it for years, these strategies are designed to be practical, approachable, and ready to use!

Agenda

Roll-Up Your Sleeves: Linear Equations

- Determining which concept to tackle first
- Recognizing slope-intercept form
- Finding m and b
- Moving between equations, graphs, tables, and points
- Recognizing patterns quickly
- Practicing GED-style questions and instructional strategies

The Strategy Behind The Score

A quick look at where GED Math points are being missed—and why.

The Calculator- A Tool, Not a Crutch

Using the TI-30XS MultiView to reduce cognitive load, check reasoning, and increase efficiency.

Recap: GED Math Test-Taking Strategies & Calculator Skills Part 1 & 2

Indicators:

add/subtract
multiply/divide
multiple operations
quadratic equations

Related Indicators:

computing w/linear
expressions
computing w/polynomials
factoring polynomials



ALGEBRAIC COMPUTATIONS

- Roll up your sleeves with algebraic operations
- Quadratic equations
- Factoring polynomials
- The Quadratic Formula



$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$3x^2 + 7x - 6$$

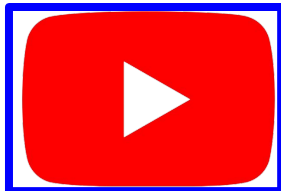
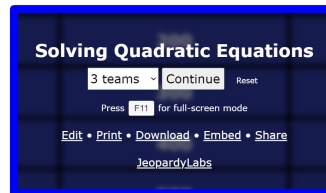
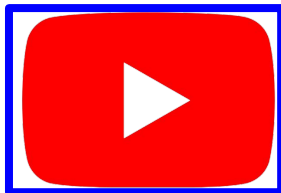
Recap: GED Math Test-Taking Strategies & Calculator Skills Part 1 & 2

Learn several calculator functions with one type of problem, no matter skill level!

BASIC SKILLS w/
ANDRAGOGIC APPROACH:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Fractions
Order of Operations
Integers
Squares & Square Roots



Factor completely.

$$3x^2 + 7x - 6$$

- ☐ A. $(x - 6)(3x + 1)$
- ☐ B. $(x - 3)(3x + 2)$
- ☐ C. $(x + 3)(3x - 2)$
- ☐ D. $(x + 6)(3x - 1)$

Factoring Using
Quadratic Formula

GED Math Test-Taking Strategies & Calculator Skills Part 3

Indicators

calculate slope from a table,
graph or equation
slope-intercept form

Related indicators

graphing equations

unit rate as slope

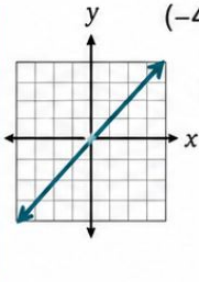
writing equations from points
and/or slope; working with
parallel and perpendicular
slopes



SLOPES / GRAPHING / LINEAR EQUATIONS BASICS

- Slopes from tables, graphs, & equations
- Graphing in slope-intercept form
- Writing equations from points & slopes
- Parallel & perpendicular slopes

$3y - 15 = -6x$
 $y = -2x + 5$



$(-4, -7) \text{ and } (-6, 9)$
 $y = -8x - 39$
 $m = 2$
 $b = 1$

The Strategy Behind the Score

When many learners hear
“GED Math,”
they immediately think...



Algebra.
Formulas.
Graphs.
Equations.



Things I don't
remember.



Things I was
never good at.



Things I'm
going to have to
learn all over
again.

**“I'm just not
a math person.”**

The Strategy Behind the Score

**Here's the
good news...**



Recognize
mathematical
relationships.



Use
information
provided to them.



Apply
the tools
available to them.



Select
an appropriate
strategy.



Solve
problems with
confidence.

Yes, it's math, but successful
test-taking doesn't require mastery
of every math concept.

The Strategy Behind the Score

And that
changes
how we teach.



Recognize
what they're looking at.



Identify
the information that matters.



Choose
a strategy.



Use
the tools available to them.



Solve
problems with confidence.

The Strategy Behind the Score

5 Things Every GED Instructor Should Know

1. Teach test-taking strategies, in addition to traditional math instruction.
2. Think like an adult learner, not like a mathematician.
3. Provide and practice the [-formula sheet-](#) in class often, especially geometry vocabulary, no matter content level of class.
4. Create your own learner account using last name as **"CANDIDATE."** -non school email.
5. Take the [GED READY PRACTICE TEST](#) several times & explore [GED FLASH](#).

The Strategy Behind the Score



EVERY QUESTION COUNTS

- ✓ Questions are **not weighted** differently—each typically counts **equally** toward the final score.
- ✓ It's not about doing the hardest problems—it's about answering **as many correctly as possible**, no matter the type.



**Accuracy + Efficiency
+ Strategy = Success**



NO PENALTY FOR WRONG ANSWERS

- ✓ Wrong answers **do not count** against you.
- ✓ The GED Math test measures what you **know**, not what you don't.
- ✓ Only **correct** answers count toward your score.
- ✓ There's **no penalty for guessing**. So even if you're unsure—take your best shot! Leaving answers blank means missing out on points.



"THREE MINUTES TO WIN IT!" STRATEGY



Prioritize Questions: Start with questions that can be answered quickly. This builds confidence and saves time.



Choose & Flag: If a question takes longer than three minutes, choose an answer, flag it, and move on. If there's time, come back to it later.



Watch the Clock: Keep an eye on the clock. With the "three minutes to win it" strategy, you'll have plenty of time to go back, review, and pick up more points.

The Strategy Behind the Score

Teaching Strategies Build Mathematical Understanding

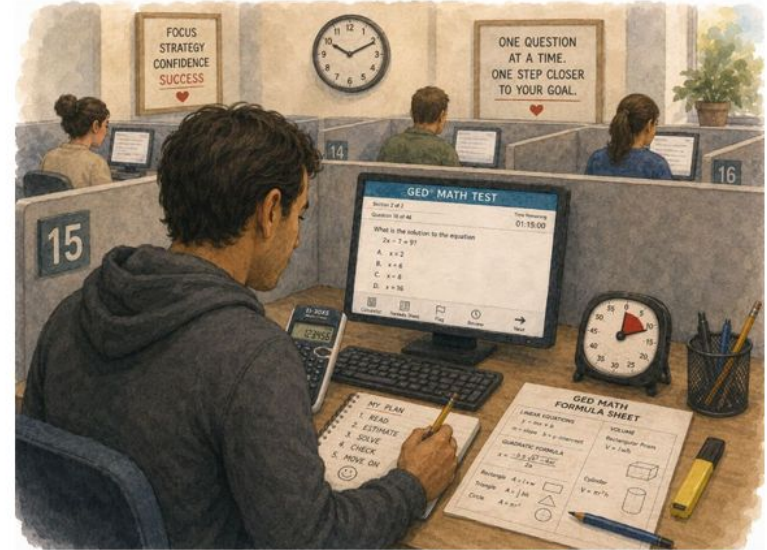
- ✓ Scaffold instruction
- ✓ Teach concepts
- ✓ Practice basic skills
- ✓ Encourage productive struggle
- ✓ Build number sense
- ✓ Repetition
- ✓ Manual computation



The Strategy Behind the Score

Test-Taking Strategies Maximize on Test Day

- ✓ Use the calculator strategically
- ✓ Read the question first
- ✓ Use estimation
- ✓ Eliminate answer choices
- ✓ Use the formula sheet
- ✓ Check answers efficiently
- ✓ Manage time



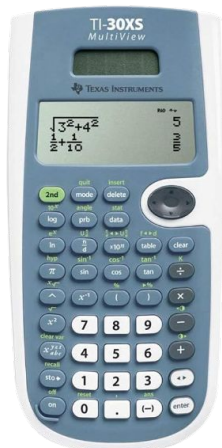
The Strategy Behind the Score

Putting it all Together

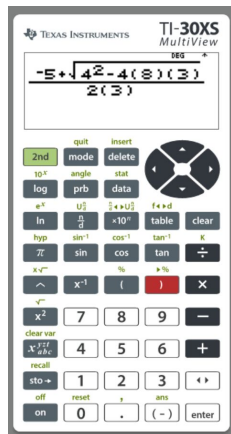


The Calculator- A Tool, Not a Crutch

TI-30XS Multiview: The Right One Counts

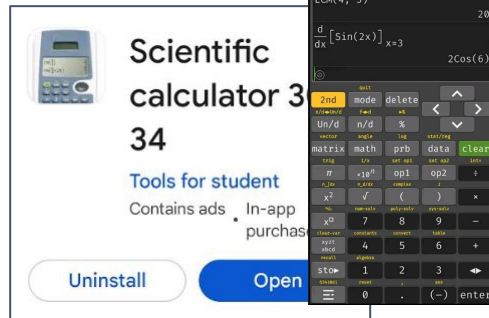


-Hand held-



-Computer
Emulator -

-TI-30xs Guide
for Teachers-



-Android Google Play-

-GED calculator
reference sheet-

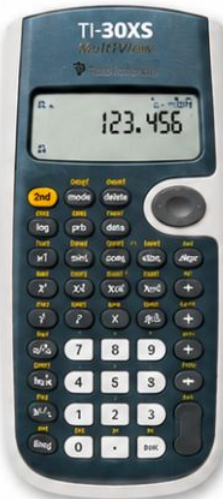


-Free web based for
computers, Android, iPhone
(ads)-

The Calculator- A Tool, Not a Crutch

CALCULATOR SKILLS

- $\frac{a}{b}$ Fractions
- .25 Decimals
- % Percents
- +/- Integers
- PEMD
DAS Order of Operations
- x^2 Powers & Roots
-  Data & Table Buttons
-  And More!



HIGH IMPACT INDICATORS - LINEAR EQUATIONS

1 CONVERTING EQUATIONS OF A LINE TO SLOPE-INTERCEPT FORM

$$Ax + By = C \rightarrow y = mx + b$$

$$\begin{aligned} 3x + 2y &= 6 \\ -3x &\quad -3x \\ 2y &= -3x + 6 \\ y &= -\frac{3}{2}x + 3 \end{aligned}$$

2 WRITING EQUATIONS OF A LINE IN SLOPE-INTERCEPT FORM USING TWO POINTS

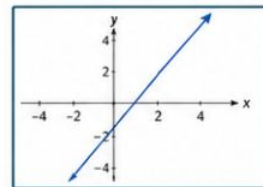
$(-4, -7)$ and $(-6, 9)$

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

$$y = -8x - 39$$

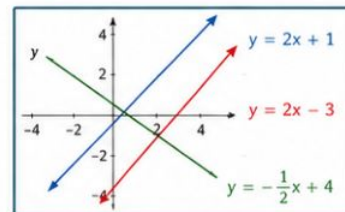
3 GRAPHING EQUATIONS OF A LINE IN SLOPE-INTERCEPT FORM

$$\text{Graph } y = \frac{3}{2}x - 4$$



4 PARALLEL & PERPENDICULAR LINES IN SLOPE-INTERCEPT FORM

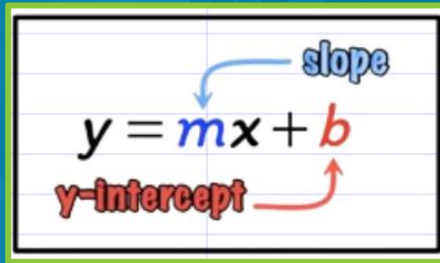
Identify relationships between lines.



Roll-up Your Sleeves!

Strategies for:

Write the Equation of a Line Given Two Points


$$y = mx + b$$

slope

y-intercept

$(-4, -7)$ and $(-6, 9)$

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$
$$y = -8x - 39$$



Find the equation of a line that passes through the points $(-1, 2)$ and $(2, -1)$





Find the equation of a line that passes through the points $(3, -4)$ and $(-2, 5)$



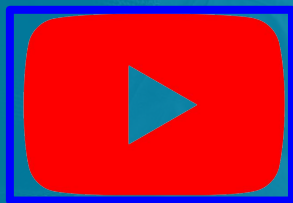


Find the equation of a line that passes through the points $(-3, 7)$ and $(4, -2)$

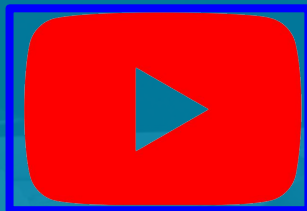


...but wait, there's more!

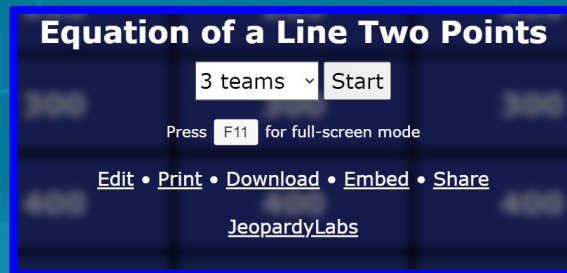
Write the Equation of a Line Given Two Points Resources



Manual



Calculator



Roll-up Your Sleeves!

Basic Algebra for:

$$y = mx + b$$

slope

y-intercept

Convert to Slope-Intercept Form

$$3y - 15 = -6x$$

$$y = -2x + 5$$





Rewrite the equation $2x - 3y = 6$ in slope-intercept form:





Rewrite the equation in
slope-intercept form: $4x + 5y - 20 = 0$



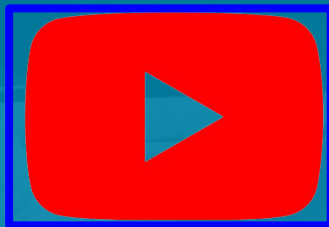


Rewrite the equation in
slope-intercept form: $7x - y$
 $= 14$



...but wait, there's more!

Convert to Slope-Intercept Form Resources



Roll-up Your Sleeves!

Strategies for:

$$y = mx + b$$

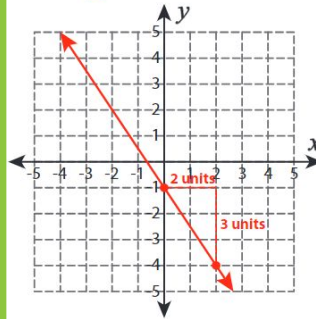
slope

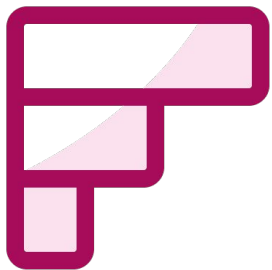
y-intercept

Graphing Equations in Slope-Intercept Form

$$-3x - 2 = 2y$$

$$y = -\frac{3}{2}x - 1$$





Rank your comfort level with each step of converting equations to slope-intercept form and then graphing it, with 1 being the most comfortable and 5 being the least comfortable.



...but wait, there's more!

Graphing Equations in Slope-Intercept Form Resources

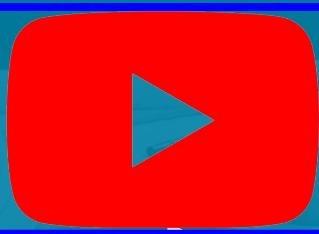
Linear Equations/slope-intercept form 2

3 teams ▾ Start

Press **F11** for full-screen mode

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[JeopardyLabs](#)



Linear Equations/slope-intercept form 3

3 teams ▾ Start

Press **F11** for full-screen mode

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[JeopardyLabs](#)



TESTING SERVICE®

Roll-up Your Sleeves!

Strategies for:

Multiple Choice Graphing an Equation in Slope-Intercept Form

$$y = mx + b$$

slope

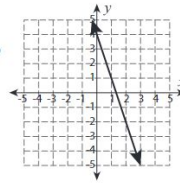
y-intercept

Which of the following equation represents the line on the graph?

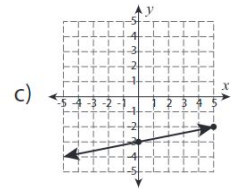
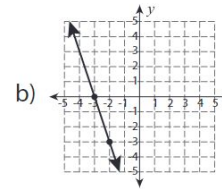
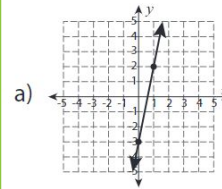
a) $y = x + 4$

b) $y = 2x - 4$

c) $y = -3x + 4$



Which of the following graph represents the equation $y = 5x - 3$?





Which graph represents:
 $2y = 8 - 8x$?





What is the equation of the given graph?





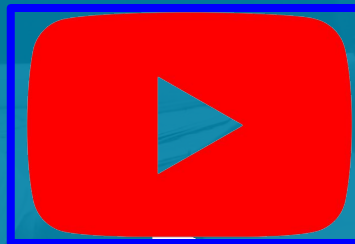
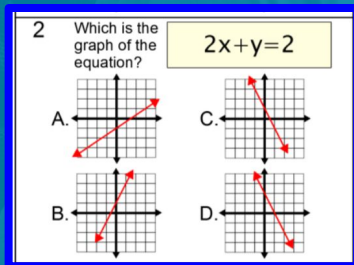
Which graph has the same
slope and y-intercept as
equation $2x = y - 1$



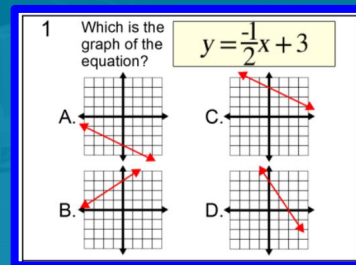
...but wait, there's more!

Multiple Choice Graphing an Equation in Slope-Intercept Form

Resources



G E D
TESTING SERVICE®



Q & A

which about? help? why what who

HOW answers

Where why

FAQ

WHO WHEN WHY

WHERE when

Hot Topics

National Math Bootcamp 2026



SHAWN WATTS
STATE RELATIONSHIP MANAGER

Purpose

: To create a nationally recognized Math Intensive Bootcamp model that accelerates student success by targeting the “3 of 4” population needing math completion, removing barriers, increasing credential attainment, and empowering learners to successfully finish their educational journey with confidence and measurable outcomes.



Planning Considerations

- ❑ Selected the right instructor to deliver the online - fast paced style of learning
- ❑ Pre-selected 3 of 4 learners (Approx. 11,000 invitations sent out.)
- ❑ GED Ready vs Actual GED exam
- ❑ How long ago did they test
- ❑ Limit number in class
- ❑ Limit number of time zones selected
- ❑ Office hours for learners
- ❑ Plan for re-education if learner fails
- ❑ Utilizing GED & Me for pre-work and classroom support
- ❑ Study materials needed during the session



Bootcamp Details

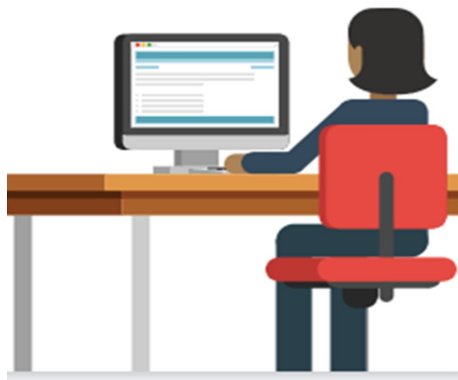
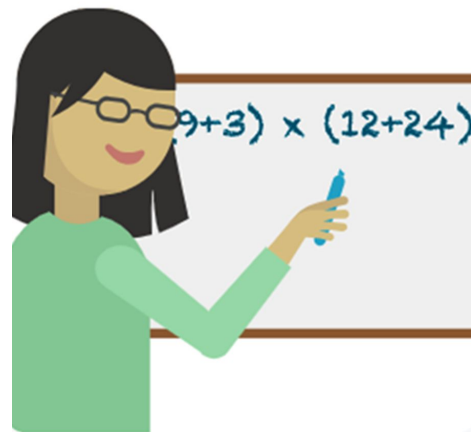
Instructor(s):

- ☐ **Lead Instructor** - Kellie Blair Hardt
- ☐ **1-2 assistants**

Instructor/Material Cost:

Class Statistics:

- ☐ **Max. size:** 60, **Score:** Min. 142 Math Exam, **Last Exam:** 2024-2026, **Time Zone:** Eastern/Central



Student Cost: Exam pricing only – Refer students to state provided subsidies

Environment: Online - (Central/Eastern) time zone

Time Frame: 4 weeks, 2 times a week, 3 hours each session

Proposed Bootcamp Dates 2026:

October

Learner Requirements



- 142 and above on actual GED Math
- Tested within the last 2 years
- Age 18+ years old
- Must attend all sessions
- Must test within 1 week of the conclusion of the session
- Must be able to pay for exam at the conclusion of the session
- Participating in an exit survey/interview to improve future sessions

**NATIONAL
GED DAY**
SEPTEMBER 16

□ Recognize learners, graduates, educators, and supporters

□ ***#NationalGEDDay #GED***

See You Next Year!
Las Vegas, Nevada
July 28 – 30, 2027 | The Venetian Resort

Thank You!

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https://www.ged.com/contact_us/

