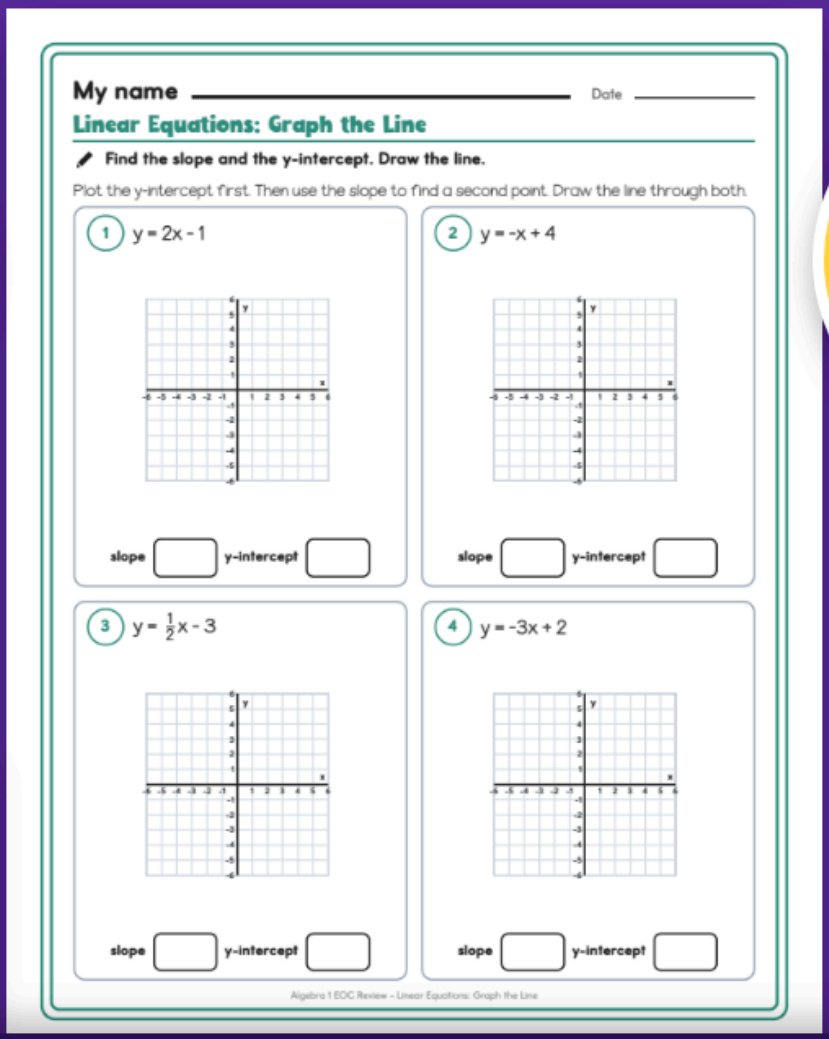
Bright Path Sped

17 STUDENT PAGES

34 PAGES




My name _____ Date _____

Linear Equations: Graph the Line

Find the slope and the y-intercept. Draw the line.

Plot the y-intercept first. Then use the slope to find a second point. Draw the line through both.

1) $y = 2x - 1$

slope ____ y-intercept ____

2) $y = -x + 4$

slope ____ y-intercept ____

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

slope ____ y-intercept ____

4) $y = -3x + 2$

slope ____ y-intercept ____

Algebra 1 EOC Review – Linear Equations: Graph the Line

ALGEBRA I EOC REVIEW

PRACTICE BY STRAND
GRADES 9-10

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- The name line, every answer box, every ruled work box and every check box on the student pages are type-in fields, and so are the tracker, class grid, team note and family page. You can also print any page and write by hand.
- It works offline. No account, no subscription, no internet connection needed after you download it.

Print at 100 percent

Turn off fit to page and shrink to fit so the ruled lines stay 0.34 inch apart, the graph grids keep square units, and the cut pieces on the divider-tab page stay 2.4 by 3.1 inches. Every student page prints clean in black and white, so it still reads when copied in black and white.

Student work

A filled-in tracker, class grid or team note carries a real student's name. Keep it in the data folder, and use a first name only on any page that leaves your hands.

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PREVIEW

Preview · Bright Path Sped

How To Read a Page

The parts of a student page, then the page types in the order they come.

The parts of a page

- **The answer box.** A bordered box for a letter, a number or an expression. Click it to type, or print and write in it.
- **The ruled work box.** Lines 0.34 inch apart for steps and sentences. Write one step to a line.
- **The check box.** Yes or no, up or down: click or mark.
- **The graph grid.** A coordinate grid with square units. Print it to plot on, or read the graph that is already drawn.
- **The key idea box.** A short reminder and one worked example at the top of a work page.

Page type	What it looks like	What the student does
Words to Know	1 page	Match eight words to their meanings.
Work pages	7 pages	Solve equations, graph lines, read functions, solve a system three ways, use exponent rules, factor and read parabolas.
Questions	5 pages	Six multiple-choice items and one short answer for every strand.
Mixed review	2 pages, 16 items	Items from all five strands, so students must decide which strand an item is from.
Checks	2 pages	A find-the-mistake page with four invented errors and a self check.

Untimed, unscored on the page

No student page has a timer or a score on it. The keys and the tracker are for you. The answer keys are on pages 22 to 25.

Short answers

The short-answer key (page 25) says what to look for, not one right sentence. Accept any answer that uses the correct idea in the student's own words.

Printing and the type-in fields

Every page prints clean in black and white. The name line, every answer box, every ruled box and every check box are type-in fields in any PDF reader: click one, type, then save. The graph grids are for pencil. This is a fillable PDF, not a slideshow or a word-processor file.

Room to work

Work boxes hold two or more lines. If a student needs more room, hand over one page a day, or let students work on scrap paper and copy the answer into the box.

PREVIEW

Preview · Bright Path Sped

My name _____ Date _____

Algebra 1 EOC Review: Words to Know

Match each word to what it means.

Read first

These eight words come back in every strand. A graph, a table and an equation can all show the same function, so you will meet each word more than once.

Write the letter of the meaning in the box.

1	**slope**		**A**	One of the numbers or expressions that multiply to make another.
2	**y-intercept**		**B**	A rule that gives exactly one output for each input.
3	**function**		**C**	The highest or lowest point of a parabola.
4	**solution of a system**		**D**	How steep a line is: the rise over the run.
5	**exponent**		**E**	The point where the graphs cross; it makes both equations true.
6	**factor**		**F**	The U-shaped graph of a quadratic.
7	**parabola**		**G**	The point where a graph crosses the y-axis.
8	**vertex**		**H**	Tells how many times the base is used as a factor.

Use two of the words in one sentence about a graph.

PREVIEW

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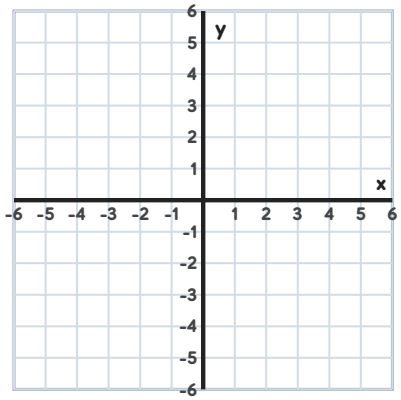
My name _____ Date _____

Linear Equations: Graph the Line

Find the slope and the y-intercept. Draw the line.

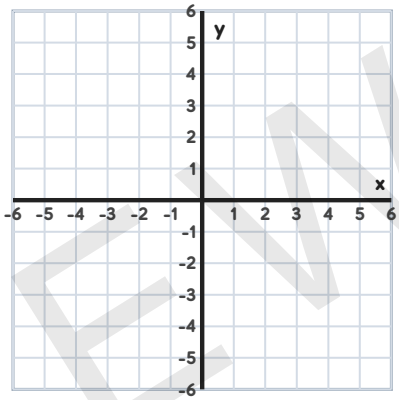
Plot the y-intercept first. Then use the slope to find a second point. Draw the line through both.

1 $y = 2x - 1$



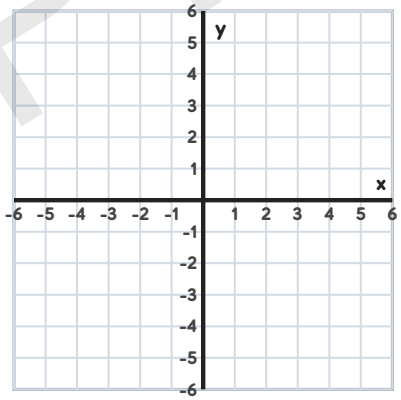
slope _____ y-intercept _____

2 $y = -x + 4$



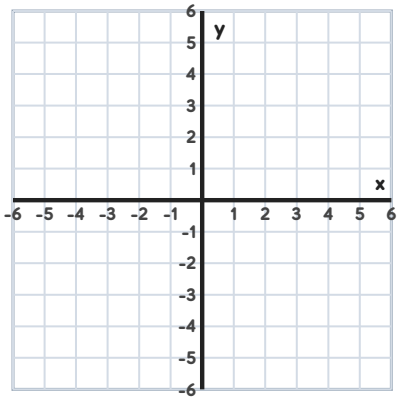
slope _____ y-intercept _____

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



slope _____ y-intercept _____

4 $y = -3x + 2$



slope _____ y-intercept _____

PREVIEW

Preview · Bright Path Sped

My name _____ Date _____

Functions: Tables and Graphs

Check function or not. Fill in the table. Read the graph.

1. Is each table a function? Check yes or no.

Table A

x	y
1	3
2	5
3	7
4	9

Function?

☐ yes ☐ no

Table B

x	y
2	1
2	4
3	6
5	8

Function?

☐ yes ☐ no

Table C

x	y
0	5
1	5
2	5
3	5

Function?

☐ yes ☐ no

Table D

x	y
1	2
3	4
3	6
4	7

Function?

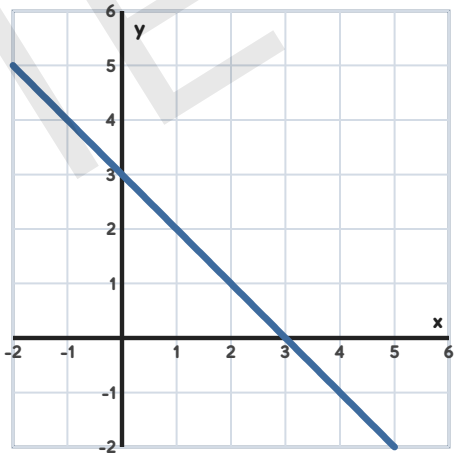
☐ yes ☐ no

2. Put each x into $f(x) = 3x - 2$

x	f(x)
-1	
0	
2	
5	

Show one of your steps:

3. Read the graph of g(x)



g(0) = ☐ **g(2) =** ☐

g(x) = -1 when x = ☐

How can you tell when a table is not a function?

PREVIEW

Preview · Bright Path Sped

My name _____ Date _____

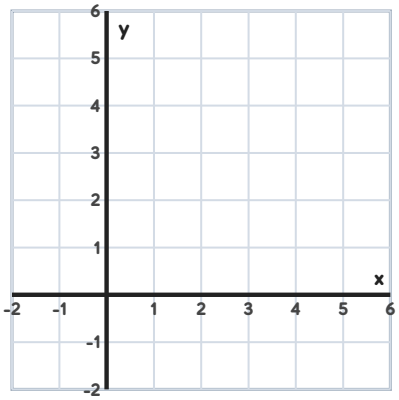
Systems: Solve Three Ways

Find where the lines meet. Use three ways.

Each box shows one way to solve a system.

1 Graph it

$y = x + 1$ $y = -x + 5$



The lines cross at (☐ , ☐)

2 Substitution

$y = 2x$ $x + y = 12$

Show your work:

x = ☐ **y =** ☐

3 Elimination

$x + y = 10$ $x - y = 4$

Show your work:

x = ☐ **y =** ☐

4 Check a point

$y = 2x - 5$ $x + y = 4$

Show your work:

Is (3, 1) a solution of both equations?

☐ **yes** ☐ **no**

PREVIEW

Preview · Bright Path Sped

My name _____ Date _____

Exponents: Rules and Growth

Simplify each one. Then fill in the table.

Key ideas: the rules for exponents

Same base, multiply: add the exponents. $(x^2)(x^3) = x^5$

Same base, divide: subtract. $\frac{x^6}{x^2} = x^4$

Power of a power: multiply. $(x^2)^3 = x^6$

Zero power: equals 1. $5^0 = 1$ Negative power: flip it. $x^{-1} = \frac{1}{x}$

1

$(x^3)(x^4) =$ ☐

2

$\frac{x^9}{x^4} =$ ☐

3

$(x^2)^5 =$ ☐

4

$6^0 =$ ☐

5

$(2x^3)^2 =$ ☐

6

$x^{-2} =$ ☐

A paper is folded in half again and again. Each fold doubles the layers.

Folds	0	1	2	3	4	5
Layers	1					

How many layers after 8 folds? ☐

PREVIEW

Preview · Bright Path Sped

My name _____ Date _____

Quadratics: Factor and Solve

Factor each one. Then find x.

Key idea: factor, then set each factor to 0

Example: $x^2 + 5x + 6 = 0$. Find two numbers that multiply to 6 and add to 5: 2 and 3. Factor: $(x + 2)(x + 3) = 0$. So $x = -2$ or $x = -3$.

Write the sign with each number, like +3 or -4.

1 $x^2 + 7x + 12 = 0$

Factor: (x ☐)(x ☐) = 0

x = ☐ or x = ☐

2 $x^2 - 5x + 6 = 0$

Factor: (x ☐)(x ☐) = 0

x = ☐ or x = ☐

3 $x^2 + 2x - 15 = 0$

Factor: (x ☐)(x ☐) = 0

x = ☐ or x = ☐

4 $x^2 - 4x - 21 = 0$

Factor: (x ☐)(x ☐) = 0

x = ☐ or x = ☐

5 $x^2 - 9 = 0$

Factor: (x ☐)(x ☐) = 0

x = ☐ or x = ☐

6 $x^2 + 6x + 9 = 0$

Factor: (x ☐)(x ☐) = 0

x = ☐ or x = ☐

PREVIEW

Preview · Bright Path Sped

My name _____ Date _____

Quadratics: Questions

Pick the best answer. Write its letter.

1. Which is the factored form of $x^2 + 8x + 15$?
   A $(x + 2)(x + 6)$ **B** $(x + 3)(x + 5)$ **C** $(x + 1)(x + 15)$ ☐

2. What are the solutions of $(x - 4)(x + 1) = 0$?
   A $x = 4$ or $x = -1$ **B** $x = -4$ or $x = 1$ **C** $x = 4$ or $x = 1$ ☐

3. A parabola crosses the x-axis at 1 and 5. What is the x-coordinate of its vertex?
   A 6 **B** 2 **C** 3 ☐

4. What is the y-intercept of $y = x^2 - 6$?
   A -6 **B** 6 **C** 0 ☐

5. Which equation has a parabola that opens down?
   A $y = 2x^2 - 3$ **B** $y = x^2 + 5$ **C** $y = -2x^2 + 3$ ☐

6. A ball's height is $h = -t^2 + 4t$ meters after t seconds. What is h when t = 2?
   A 12 meters **B** 4 meters **C** 0 meters ☐

7. Tell how the x-intercepts of a parabola are related to the solutions of its equation. Use x squared - 5x + 6 = 0.

PREVIEW

Preview · Bright Path Sped

My name _____ Date _____

Algebra 1 EOC Review: Find the Mistake

Find the mistake. Then fix it.

Rio is made up for practice. Each one has one mistake.

1 **Rio wrote:**

$3x - 6 = 12$, so $3x = 6$ and $x = 2$.

What is wrong?

Write it the right way.

2 **Rio wrote:**

The slope from (1, 2) to (3, 8) is (3 - 1) over (8 - 2), which is 1/3.

What is wrong?

Write it the right way.

3 **Rio wrote:**

$(x^3)(x^4) = x^{12}$

What is wrong?

Write it the right way.

4 **Rio wrote:**

$x^2 + 5x + 6 = (x + 2)(x + 3) = 0$, so $x = 2$ or $x = 3$.

What is wrong?

Write it the right way.

PREVIEW

Answer Key: Words and Linear Equations

Every letter is the position of the right option in the printed list. Answers are computed from the page data.

Algebra 1 EOC Review: Words to Know page 5

Item	Answer
1. slope	D
2. y-intercept	G
3. function	B
4. solution of a system	E
5. exponent	H
6. factor	A
7. parabola	F
8. vertex	C

Linear Equations: Solve It page 6

Item	Answer	Note
1. x + 9 = 23	x = 14	both sides 23
2. 4x = 52	x = 13	both sides 52
3. 3x - 7 = 20	x = 9	both sides 20
4. 2(x + 4) = 18	x = 5	both sides 18
5. 5x - 3 = 2x + 12	x = 5	both sides 22
6. $\frac{x}{4}$ + 3 = 8	x = 20	both sides 8

Linear Equations: Questions page 8

Item	Ltr	Answer
1	A	x = 5
2	C	3
3	B	y = -2x + 7
4	A	x = 6
5	C	y = 23
6	B	8 cm

Linear Equations: Graph the Line page 7

Item	Answer	Note
1a slope	2	points (0, -1) and (1, 1)
1b y-intercept	-1	the line crosses the y-axis at -1
2a slope	-1	points (0, 4) and (1, 3)
2b y-intercept	4	the line crosses the y-axis at 4
3a slope	1/2	points (0, -3) and (2, -2)
3b y-intercept	-3	the line crosses the y-axis at -3
4a slope	-3	points (0, 2) and (1, -1)
4b y-intercept	2	the line crosses the y-axis at 2

Linear notes

- Every equation is solved with exact fractions in the program that built this page; the check column is what both sides equal.
- For the graphs, any line through the two listed points is right. Slope is rise over run: change in y over change in x.

PREVIEW

Answer Key: Exponents and Quadratics

The quadratics are built from their roots, so every factor pair and every parabola fact is exact.

Exponents: Rules and Growth page 13

Item	Answer	Note
1. $(x^3)(x^4)$	x^7	-
2. $\frac{x^9}{x^4}$	x^5	-
3. $(x^2)^5$	x^{10}	-
4. 6^0	1	-
5. $(2x^3)^2$	$4x^6$	-
6. x^{-2}	$\frac{1}{x^2}$	-
Table: 1 folds	2	2 to the 1
Table: 2 folds	4	2 to the 2
Table: 3 folds	8	2 to the 3
Table: 4 folds	16	2 to the 4
Table: 5 folds	32	2 to the 5
8 folds	256	2 to the 8

Exponents: Questions page 14

Item	Ltr	Answer
1	A	x^8
2	C	9
3	B	x^6
4	B	$8x^6$
5	A	$\frac{1}{9}$
6	C	80

The rules

- Product rule: add exponents (3 + 4 = 7). Quotient rule: subtract (9 - 4 = 5). Power rule: multiply (2 times 5 = 10).
- Layers double each fold: 1, 2, 4, 8, 16, 32, and 256 after 8 folds.

Quadratics: Factor and Solve page 15

Item	Answer	Note
1a $x^2 + 7x + 12$	$(x + 3)(x + 4)$	12 and 7: 3 and 4
1b solutions	x = -3 or x = -4	-
2a $x^2 - 5x + 6$	$(x - 2)(x - 3)$	6 and -5: -2 and -3
2b solutions	x = 2 or x = 3	-
3a $x^2 + 2x - 15$	$(x + 5)(x - 3)$	-15 and 2: 5 and -3
3b solutions	x = -5 or x = 3	-
4a $x^2 - 4x - 21$	$(x - 7)(x + 3)$	-21 and -4: -7 and 3
4b solutions	x = 7 or x = -3	-
5a $x^2 - 9$	$(x - 3)(x + 3)$	-9 and 0: -3 and 3
5b solutions	x = 3 or x = -3	-
6a $x^2 + 6x + 9$	$(x + 3)(x + 3)$	9 and 6: 3 and 3
6b solutions	x = -3 (both factors)	-

Quadratics: Read the Parabola page 16

Item	Answer	Note
1 opens	up	-
1 vertex	(2, -1)	-
1 x-intercepts	1 and 3	-
1 y-intercept	3	-
2 opens	down	-
2 vertex	(1, 4)	-
2 x-intercepts	-1 and 3	-
2 y-intercept	3	-
Table y at x = -1	0	-
Table y at x = 0	-3	-
Table y at x = 1	-4	-
Table y at x = 2	-3	-
Table y at x = 3	0	-
Table: crosses at	x = -1 and x = 3	where y = 0

Quadratics: Questions page 17

Item	Ltr	Answer
1	B	$(x + 3)(x + 5)$
2	A	x = 4 or x = -1
3	C	3
4	A	-6
5	C	$y = -2x^2 + 3$
6	B	4 meters

PREVIEW

Algebra 1 EOC Review Tracker

One student, every scored page, strand by strand. Filled example: page 30.

Student _____ Teacher _____ Month _____

Page	Page type and set	Items	Right	Date	Notes
5	Algebra 1 EOC Review: Words to Know	8			
6	Linear Equations: Solve It	6			
7	Linear Equations: Graph the Line	8			
8	Linear Equations: Questions	6			
9	Functions: Tables and Graphs	11			
10	Functions: Questions	6			
11	Systems: Solve Three Ways	7			
12	Systems: Questions	6			
13	Exponents: Rules and Growth	12			
14	Exponents: Questions	6			
15	Quadratics: Factor and Solve	12			
16	Quadratics: Read the Parabola	14			
17	Quadratics: Questions	6			
18	Algebra 1 EOC Review: Mixed Set A	8			
19	Algebra 1 EOC Review: Mixed Set B	8			
20	Algebra 1 EOC Review: Find the Mistake	4			

PREVIEW

How to fill this in

Write how many items the student got right with no prompt, and the date. A blank means not tried yet, never wrong. There are 128 items on the 16 scored pages. Answer keys: pages 22 to 25. Filled example: page 30.

This month we are working on (your own standard or wording)

Team Note

Use this page between team meetings or when a student moves classes, to hand off what changed without writing a note from scratch. Everything below is observable, with a blank for the number or the wording your team already uses.

Student _____ Team member _____ Date _____

Strand	Covered since last note (Y/N)	Items right	Still blank
Linear Equations			
Functions			
Systems of Equations			
Exponents			
Quadratics			
Mixed sets			

What I saw (observable, not a conclusion)

- Got ___ of 6 equations right without a prompt (page 6).
- Got ___ of 7 system items right (page 11).
- Got ___ of 16 mixed review items right (pages 18, 19).
- Explained how to check a solution out loud: yes / no / with a reminder.

Next step

- Next page or strand: ___, because ___ (what you saw).
- What to try in another class or at home: ___.
- What to keep doing because it is working: ___.
- Anything for the team meeting to decide: ___ (this page records what happened, never a label or a plan).

Summary, in one or two sentences, for whoever reads this next

A filled-in line, for reference

"Got 3 of 6 systems questions right on 10/22. Next step: redo the substitution box on the systems work page and say which number is x and which is y before writing the pair." That is the level of detail this page is built for. It matches the filled example on page 30.

PREVIEW

Maya's Tracker (Invented Student)

Maya R. is invented; nothing on this page describes a real student. The blank tracker is on page 26.

Student: Maya R. (an invented student)

Teacher: Mr. Okafor (invented)

Month: October and November

Page	Page type and set	Items	Right	Date	Notes
5	Algebra 1 EOC Review: Words to Know	8	6	10/6	Mixed up factor and exponent
6	Linear Equations: Solve It	6	5	10/8	Sign slip on 3x - 7 = 20
7	Linear Equations: Graph the Line	8	8	10/10	-
8	Linear Equations: Questions	6	6	10/13	-
9	Functions: Tables and Graphs	11	8	10/15	Missed table D and two f(x) values
10	Functions: Questions	6	5	10/17	Missed the inputs question
11	Systems: Solve Three Ways	7	4	10/20	Elimination step went wrong
12	Systems: Questions	6	3	10/22	Mixed up the order of x and y
13	Exponents: Rules and Growth	12	-	-	-
14	Exponents: Questions	6	-	-	-
15	Quadratics: Factor and Solve	12	-	-	-
16	Quadratics: Read the Parabola	14	-	-	-
17	Quadratics: Questions	6	-	-	-
18	Algebra 1 EOC Review: Mixed Set A	8	5	11/3	Missed the system and the quadratic
19	Algebra 1 EOC Review: Mixed Set B	8	-	-	-
20	Algebra 1 EOC Review: Find the Mistake	4	-	-	-

PREVIEW

How to read it

Maya R. has done **9 of 16** scored pages and got **50 of 66** items right with no prompt. **2** pages were all right and **7** carry a note. Every number comes from the table.

What the table points to

The lowest page is Systems: Questions (3 of 6). That is where the next practice goes. The 7 pages left blank are not tried yet, never wrong.

Binder Cover

Slide this into the front of a binder. Type a name in the two fields or write it by hand. The divider tabs and a spine label to cut out are on the next page (page 33).

Math - Algebra 1

ALGEBRA I EOC REVIEW

Five Strands of Review Practice

- Linear
- Functions
- Systems
- Exponents
- Quadratics

Teacher _____

Class or student _____

PREVIEW