

IMKH California



Algebra 1

Teacher Resource Copy
Masters

UNITS 7-8



Kendall Hunt

Book 3
Certified by Illustrative Mathematics®

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LESSON BLACKLINE MASTERS

address	title	students per copy	written on?	requires cutting?	card stock recommended?	color paper recommended?	used multiple times?	used as a center material?
Activity Algebra1.1.1.1	6-12 Blank Math Community Chart	30	no	no	no	no	no	no
Activity Algebra1.1.4.2	Matching Distributions Cards	2	no	yes	no	no	no	no
Activity Algebra1.1.5.2	Heartbeats Part 1 Handout	2	yes	yes	no	no	no	no
Activity Algebra1.1.5.3	Algebra 1 Unit 1 Useful Terms and Displays	30	no	no	no	no	yes	no
Activity Algebra1.1.11.2	Describing Data Distributions Cards	2	no	yes	no	no	no	no
Activity Algebra1.1.12.3	Algebra 1 Unit 1 Useful Terms and Displays	30	no	no	no	no	yes	no
Activity Algebra1.1.13.2	African and Asian Elephants Cards	2	no	yes	no	no	no	no

address	title	students per copy	written on?	requires cutting?	card stock recommended?	color paper recommended?	used multiple times?	used as a center material?
Activity Algebra1.1.14.1	Algebra 1 Unit 1 Useful Terms and Displays	30	no	no	no	no	yes	no
Activity Algebra1.1.16.3	Heights and Handedness Handout	2	no	no	no	no	no	no
Activity Algebra1.2.16.3	What Comes Next Cards	2	no	yes	no	no	no	no
Activity Algebra1.2.17.3	Sorting Systems Cards	2	no	yes	no	no	no	no
Activity Algebra1.2.18.3	Linear Systems Cards	2	no	yes	no	no	no	no
Activity Algebra1.3.1.3	Running to the Dentist Cards	2	no	yes	no	no	no	no
Activity Algebra1.3.5.2	Data Patterns Cards	2	no	yes	no	no	no	no
Activity Algebra1.3.6.3	Best Residuals Cards	2	no	yes	no	no	no	no

address	title	students per copy	written on?	requires cutting?	card stock recommended?	color paper recommended?	used multiple times?	used as a center material?
Activity Algebra1.3.7.2	Scatter Plot Fit Cards	2	no	yes	no	no	no	no
Activity Algebra1.3.10.2	Playing Dirty Handout	2	no	no	no	no	no	no
Activity Algebra1.4.6.3	Representations of Inequalities Cards	2	no	yes	no	no	no	no
Activity Algebra1.4.8.3	Terms of A Team Cards	2	no	yes	no	no	no	no
Activity Algebra1.5.10.2	Possible or Impossible Cards	2	no	yes	yes	no	no	no
Activity Algebra1.5.12.4	Piecing It Together Cards	2	yes	yes	no	no	no	no
Activity Algebra1.5.13.1	How Good Are Your Guesses Handout	1	yes	no	no	no	no	no
Activity Algebra1.5.17.2	Caesar Says, "Shift" Cutouts	2	no	yes	yes	no	no	no

address	title	students per copy	written on?	requires cutting?	card stock recommended?	color paper recommended?	used multiple times?	used as a center material?
Activity Algebra1.5.18.3	Custom Mugs Cards	2	no	yes	no	no	no	no
Activity Algebra1.6.6.3	Matching Descriptions to Graphs Cards	2	no	yes	no	no	no	no
Activity Algebra1.6.12.4	Smartphone Sales Cards	2	no	yes	no	no	no	no
Activity Algebra1.7.12.4	Representations of Quadratic Functions Cards	2	no	yes	no	no	no	no
Activity Algebra1.7.14.4	Rocket Math Cards	2	no	yes	no	no	no	no
Activity Algebra1.7.16.3	Matching Equations with Graphs Cards	2	no	yes	no	no	no	no
Activity Algebra1.8.1.2	A Trip to the Frame Shop Handout	1	yes	no	no	no	no	no

address	title	students per copy	written on?	requires cutting?	card stock recommended?	color paper recommended?	used multiple times?	used as a center material?
Activity Algebra 1.8.22.4	Features of Functions Cards	2	no	yes	no	no	no	no
Modeling Prompt: Evaluating a Sample Response to a Modeling Prompt	Modeling Rubric	1	yes	no	no	no	no	no
Modeling Prompt: Evaluating a Sample Response to a Modeling Prompt	Advice on Modeling	1	no	no	no	no	no	no
Modeling Prompt: Display Your Data	Advice on Modeling	1	no	no	no	no	no	no
Modeling Prompt: Display Your Data	Modeling Rubric	1	yes	no	no	no	no	no
Modeling Prompt: College Characteristics	Advice on Modeling	1	no	no	no	no	no	no
Modeling Prompt: College Characteristics	Modeling Rubric	1	yes	no	no	no	no	no

address	title	students per copy	written on?	requires cutting?	card stock recommended?	color paper recommended?	used multiple times?	used as a center material?
Modeling Prompt: College Characteristics	College Data for Task Statement 1	1	no	no	no	no	no	no
Modeling Prompt: College Characteristics	College Data for Task Statement 2	1	no	no	no	no	no	no
Modeling Prompt: A New Heating System	Advice on Modeling	1	no	no	no	no	no	no
Modeling Prompt: A New Heating System	Modeling Rubric	1	yes	no	no	no	no	no
Modeling Prompt: Giving Bonuses	Modeling Rubric	1	yes	no	no	no	no	no
Modeling Prompt: Giving Bonuses	Advice on Modeling	1	no	no	no	no	no	no
Modeling Prompt: Planning a Vacation	Modeling Rubric	1	yes	no	no	no	no	no
Modeling Prompt: Planning a Vacation	Advice on Modeling	1	no	no	no	no	no	no

address	title	students per copy	written on?	requires cutting?	card stock recommended?	color paper recommended?	used multiple times?	used as a center material?
Modeling Prompt: Critically Examining National Debt	US National Debt Data	1	no	no	no	no	no	no
Modeling Prompt: Critically Examining National Debt	Modeling Rubric	1	yes	no	no	no	no	no
Modeling Prompt: Critically Examining National Debt	Advice on Modeling	1	no	no	no	no	no	no
Modeling Prompt: Designing a Fountain	Advice on Modeling	1	no	no	no	no	no	no
Modeling Prompt: Designing a Fountain	Modeling Rubric	1	yes	no	no	no	no	no
Modeling Prompt: Planning a Concert	Advice on Modeling	1	no	no	no	no	no	no
Modeling Prompt: Planning a Concert	Modeling Rubric	1	yes	no	no	no	no	no



UNIT

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Card Sort: Representations of Quadratic Functions

$$y = x^2 - 1$$

Card Sort: Representations of Quadratic Functions

$$y = x(x - 4)$$

Card Sort: Representations of Quadratic Functions

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

Card Sort: Representations of Quadratic Functions

$$y = (x + 1)(x - 1)$$

Card Sort: Representations of Quadratic Functions

$$y = (x - 1)(x - 4)$$

Card Sort: Representations of Quadratic Functions

$$y = x^2 - 4x$$

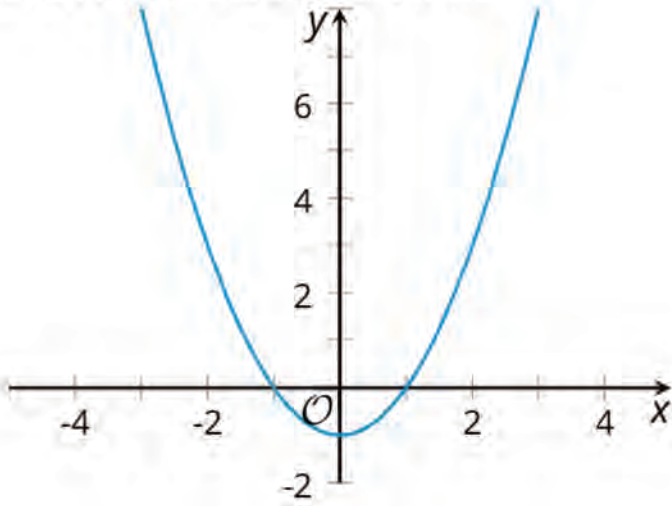
Card Sort: Representations of Quadratic Functions

$$y = (x - 2)^2$$

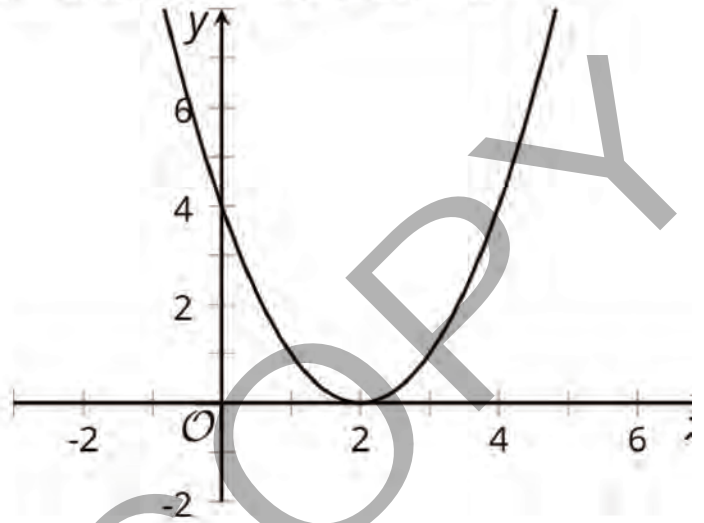
Card Sort: Representations of Quadratic Functions

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

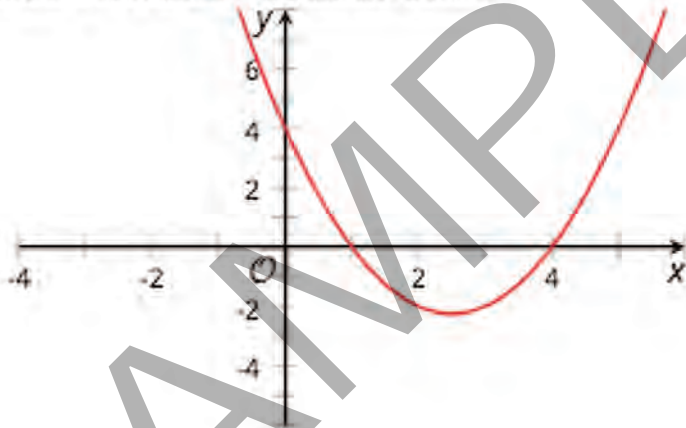
Card Sort: Representations of Quadratic Functions



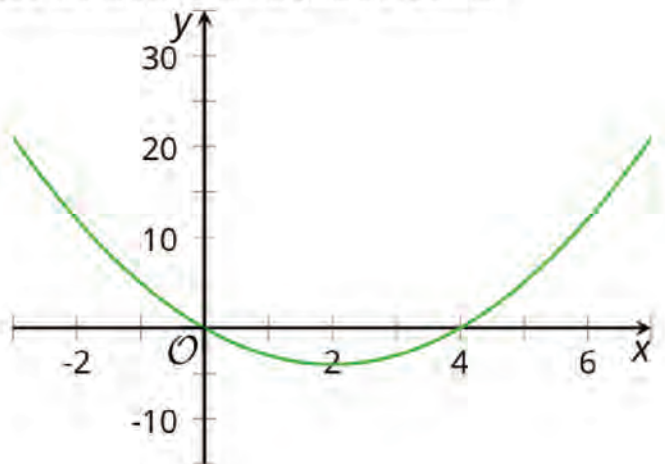
Card Sort: Representations of Quadratic Functions



Card Sort: Representations of Quadratic Functions



Card Sort: Representations of Quadratic Functions



Info Gap: Toy Rocket

Problem Card 1

Kiran was timing the flight of his toy rocket. It launches straight up from the ground.

1. How many seconds after launch did the rocket reach the highest point?
2. The rocket was 8.8 feet above ground on the way up and again on the way down. How many seconds passed between the two times it was 8.8 feet above ground?

Info Gap: Toy Rocket

Data Card 1

- The stopwatch showed 0 seconds when the toy rocket blasted off from the ground.
- It landed back on the ground when the stopwatch showed 1.6 seconds.
- The second time the rocket reached 8.8 feet, the stopwatch showed 1.1 seconds.

Info Gap: Toy Rocket

Problem Card 2

1. How many feet above the ground did the toy rocket go?
2. Jada suggested they put Kiran's rocket on a platform and then launch the rocket from there. Will the rocket reach 20 feet above ground at its highest point?

Info Gap: Toy Rocket

Data Card 2

- The equation modeling the height of Kiran's toy rocket was $y = -16x(x - 1.6)$
- y represents the height above ground in feet, and x represents time in seconds.
- The platform is 4 feet above ground.

Matching Equations with Graphs

$$f(x) = (x - 1)^2 + 4$$

Matching Equations with Graphs

$$g(x) = -(x - 4)^2 + 1$$

Matching Equations with Graphs

$$h(x) = (x + 1)^2 - 4$$

Matching Equations with Graphs

$$p(x) = -(x + 1)^2 - 4$$

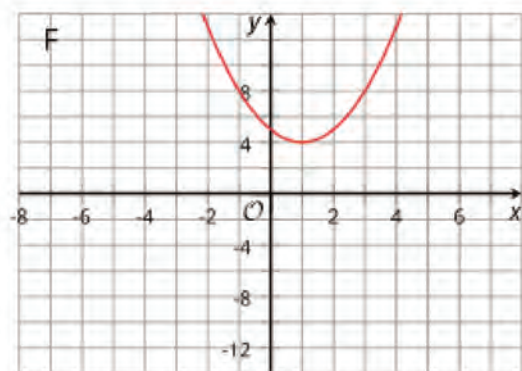
Matching Equations with Graphs

$$q(x) = 2(x - 4)^2 + 1$$

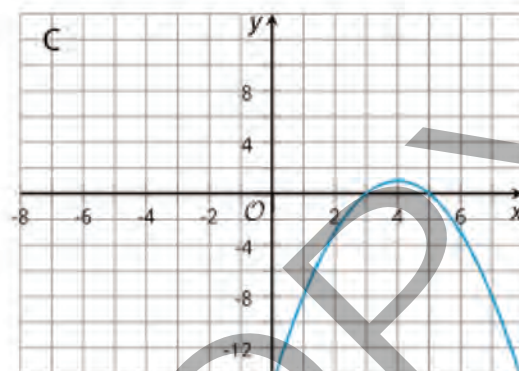
Matching Equations with Graphs

$$r(x) = (x + 4)^2 - 1$$

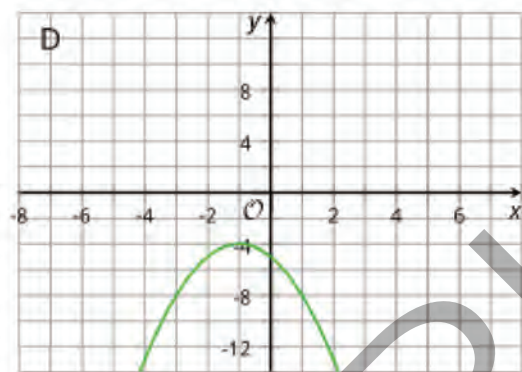
Matching Equations with Graphs



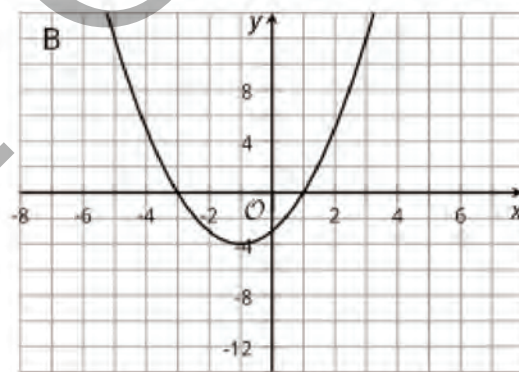
Matching Equations with Graphs



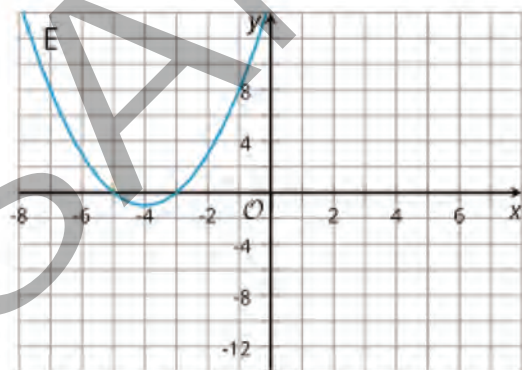
Matching Equations with Graphs



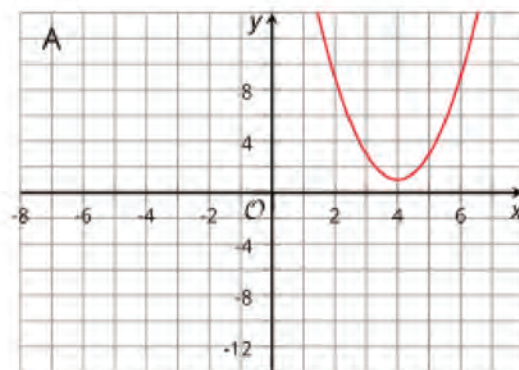
Matching Equations with Graphs



Matching Equations with Graphs



Matching Equations with Graphs





UNIT

8

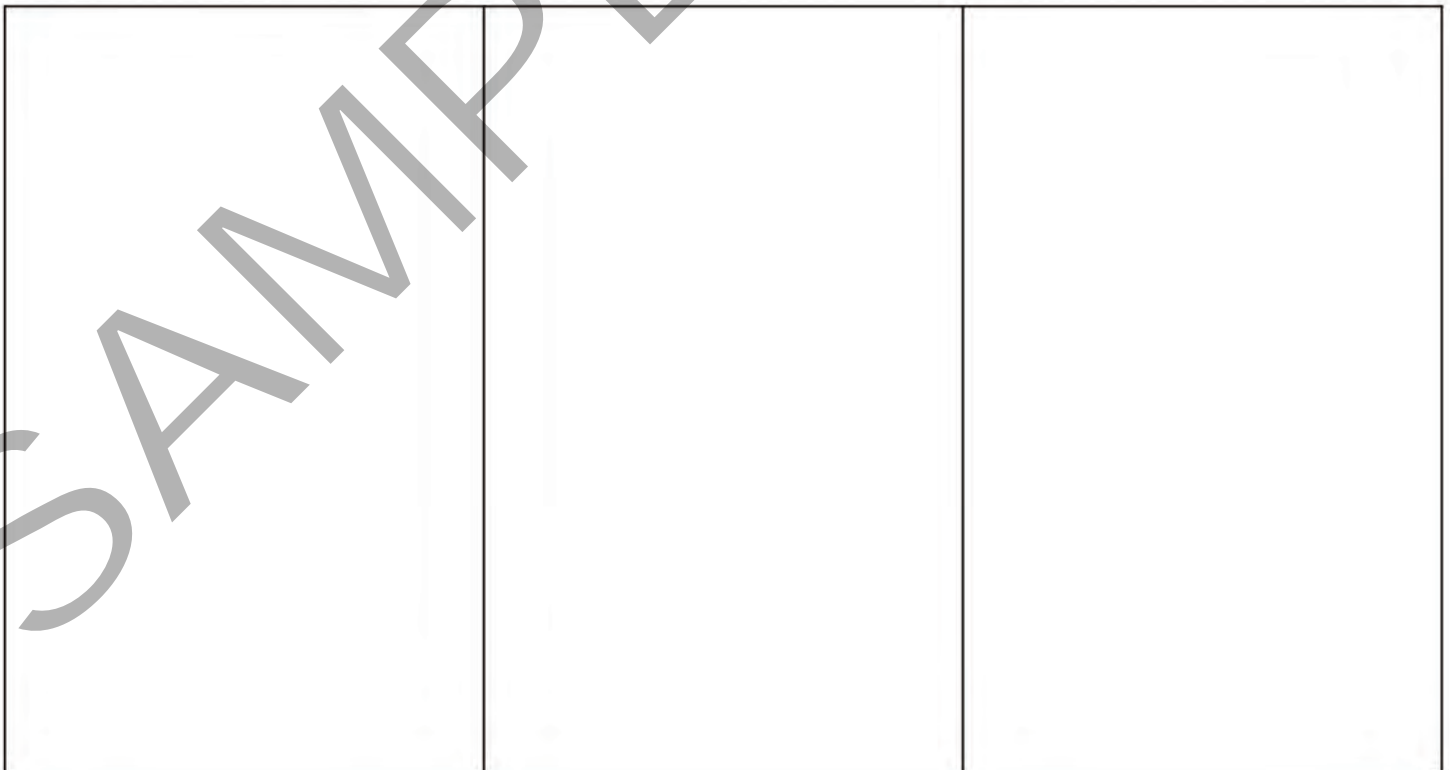
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Picture: 7 inches by 4 inches



Framing material: 4 inches by 2.5 inches



Info Gap: Features of Functions

Problem Card 1

1. Write an expression in vertex form that could define a quadratic function, f .
2. Write an expression in factored form that could define a quadratic function, g .
3. Show that f and g do not define the same function.

Info Gap: Features of Functions

Data Card 1

- The vertex of the graph of function f is $(6, -9)$.
- The x -intercepts of the graph of function g are $(-7, 0)$ and $(-5, 0)$.

Info Gap: Features of Functions

Problem Card 2

Functions a and b are quadratic functions.

1. What are the zeros of function a ?
2. What is the vertex of the graph representing function b ?
3. Show that a and b do not define the same function.

Info Gap: Features of Functions

Data Card 2

- Function a is defined by $(x - 5)^2 - 4$.
- Function b is defined by $(x + 1)(x - 5)$.