

SpiralEd Solutions

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CAMT 2023

Spiraling to Success

Let's Talk Math: Having the Words to Talk the Talk

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Learning how to learn...for math and for life.

Vocabulary

- Having the words to “talk the talk”....developing useful vocabulary.

Wall Work

- Having the moves to “walk the walk”...active engagement and accountability.

Spirals

- Having the questions to “think great thoughts”...one more round.

Vocabulary

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**Spiraling to Success:
having the words to
“talk the talk”**

Vocabulary



Why academic content vocabulary?

“The sum of three consecutive even whole numbers equals the product of the cube root of twenty-seven and the second number. What are the three numbers?”

Vocabulary

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«Το άθροισμα τριών διαδοχικών ζυγών ακέραιων αριθμών ισούται με το γινόμενο της κυβικής ρίζας του είκοσι επτά και του δεύτερου αριθμού. Ποιοι είναι οι τρεις αριθμοί;»

Vocabulary

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What doesn't work....

Mean:

the value obtained by dividing the sum of several quantities by their number

- Doing nothing
- Just “telling”
- Pure definitions
- Punitive vocabulary
- Biting off too much

Vocabulary

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What does work....

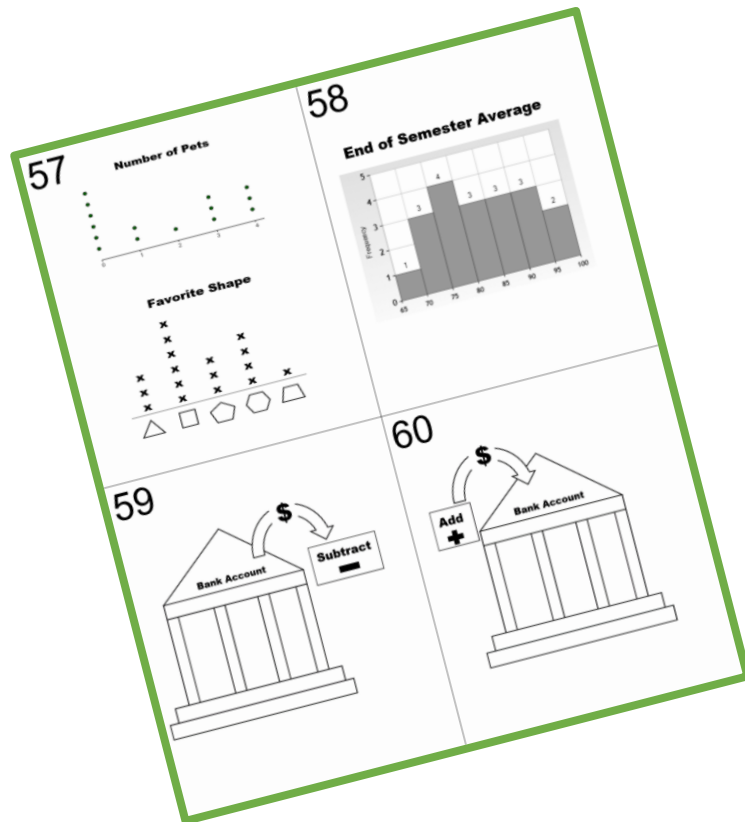


- Start the year with intent.
- Have a reasonable plan.
- Hold yourself accountable.
- Work the plan.
- Celebrate small victories.

Vocabulary

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The Plan....



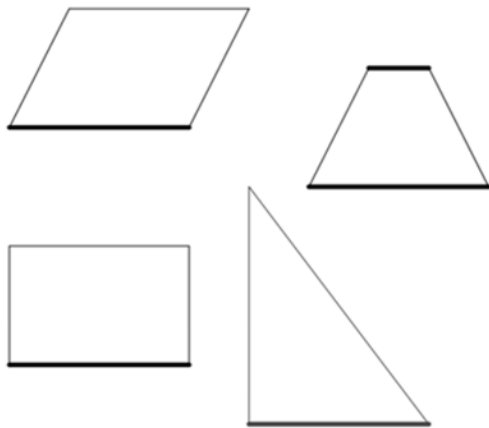
- Visual examples
- Four words per week
- Complete in the first semester
- Varied, daily practice
- Accountability

Vocabulary

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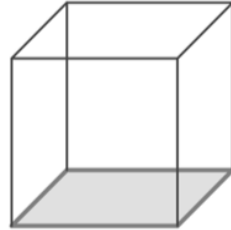
48

The length of an edge of a polygon,
used to find the area.



49

The area of one face of a prism,
used to find the volume.



51

M i d ★ d l e

#1 order numbers

#2 find the middle

5, 2, 3, 4, 6

2, 3, 4, 5, 6



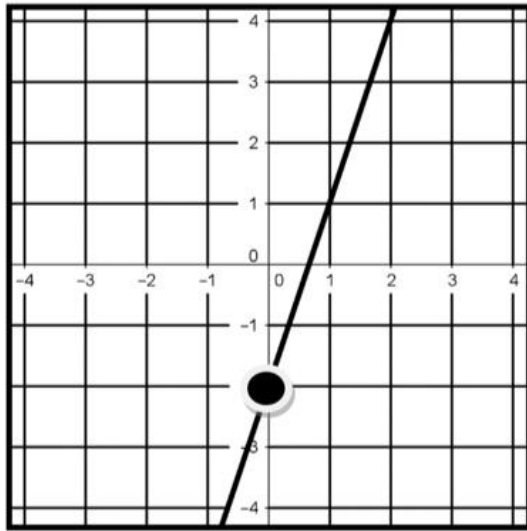
a measure of center

Vocabulary

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10

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$(0, -2)$

12

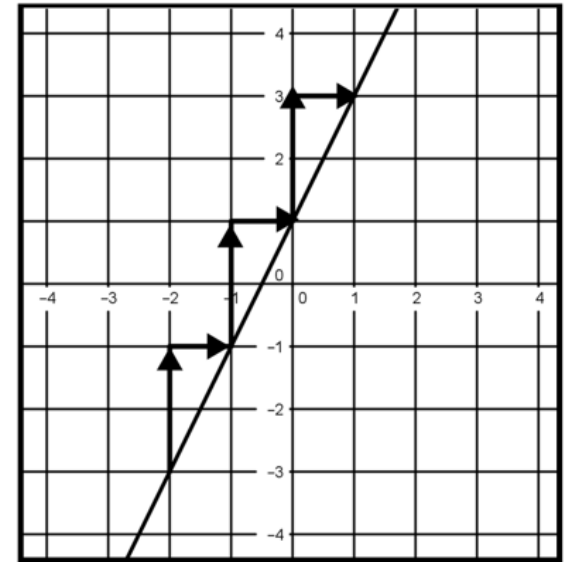
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$$y = mx + b$$

Four black arrows point towards the variables in the equation: one to 'y', one to 'm', one to 'x', and one to 'b'.

4

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$m = 2$

Vocabulary

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SpiralEd Solutions Vocabulary Cards Directions

- Prepare a set of cards for each student. This can be done on cardstock, colored paper, or plain paper; or have a class set of cards with enough cards for each pair of students to work. Sets can be reused each year.
- Distribute and introduce 4 cards each week. This will facilitate introduction of the entire deck the first semester of school.
- Have students write the information listed below on the back of the appropriate card.
- Have students interact with cards for a few minutes each day. Vary activities, teaching students how best to benefit from vocabulary cards. With only four new cards a week, students are not overwhelmed.
- Test student progress every few weeks. Students must understand that as the deck grows, they are responsible for all words to date.
- Play games with the cards. Make the experience as fun and positive as possible.
- Acknowledge students who use vocabulary from the cards in classroom conversations.
- The cards may not follow a particular Grade 6 scope and sequence. They are somewhat random. This is intentional. Students are not learning vocabulary for a given unit, but for Grade 6 math in general. Frontloading future vocabulary helps students master new concepts more quickly.

- Card 1 **whole numbers**
- Card 2 **integers**
- Card 3 **rational numbers**
- Card 4 **a. sum; b. difference; c. product; d. quotient**
- Card 5 **multiplication and division inverse**
- Card 6 **fraction format; "doghouse"; primary division sign**
- Card 7 **absolute value**
- Card 8 **inverse**
- Card 9 **factor**
- Card 10 **prime factorization**
- Card 11 **numerator; denominator**
- Card 12 **a. proper; b. improper; c. mixed number**
- Card 13 **increase**

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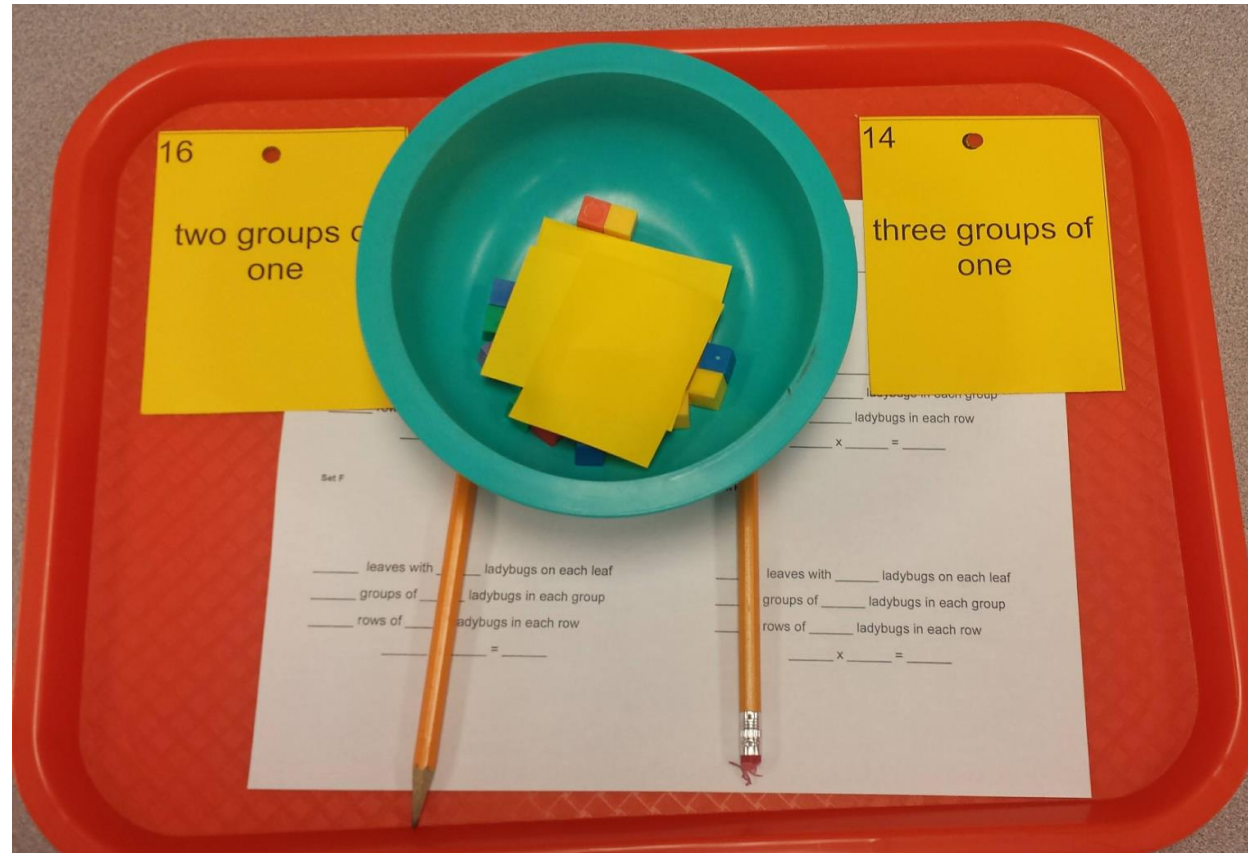
Teacher File

Vocabulary

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Student management....

Card management....



Vocabulary

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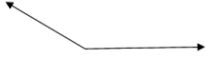
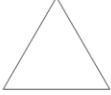


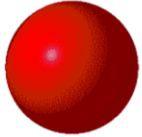
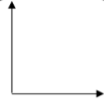



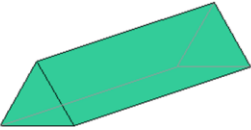
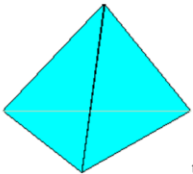
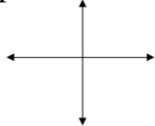


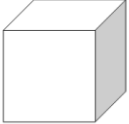










Have fun....



- Using flash cards
- Back Talk
- Table work
- One Up
- Strong questions
- Flyswatter
- What's the question?
- Know the difference
- Bingo
- Wall Work
- 20 Questions

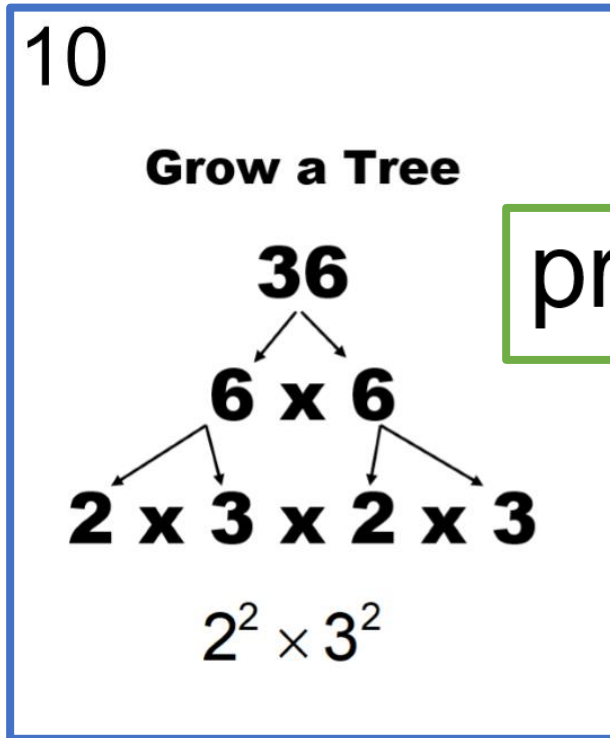
Vocabulary

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<p>square</p> 	<p>rectangle</p> 	<p>cylinder</p> 	<p>hexagon</p> 	<p>acute angle</p> 	<p>obtuse angle</p> 
<p>equilateral triangle</p> 	<p>right triangle</p> 	<p>square pyramid</p> 	<p>sphere</p> 	<p>right angle</p> 	<p>parallel lines</p> 
<p>trapezoid</p> 	<p>parallelogram</p> 	<p>triangular prism</p> 	<p>triangular pyramid</p> 	<p>perpendicular lines</p> 	<p>intersecting lines</p> 
<p>rhombus</p> 	<p>cube</p> 	<p>cone</p> 	<p>ray</p> 	<p>obtuse triangle</p> 	<p>octagon</p> 
<p>rectangular prism</p> 	<p>pentagon</p> 	<p>line</p> 	<p>segment</p> 	<p>translation</p> 	<p>reflection</p> 

Vocabulary

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prime factorization

Table Work

Vocabulary

prime factorization

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Grow a Tree

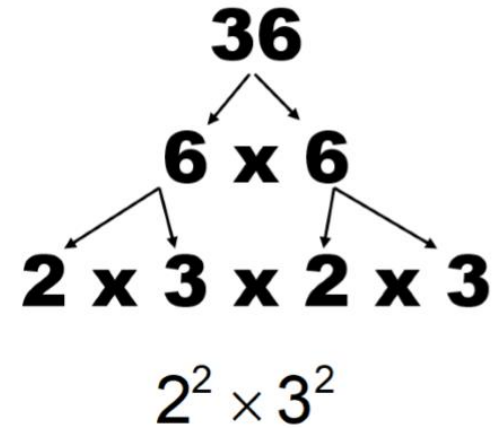
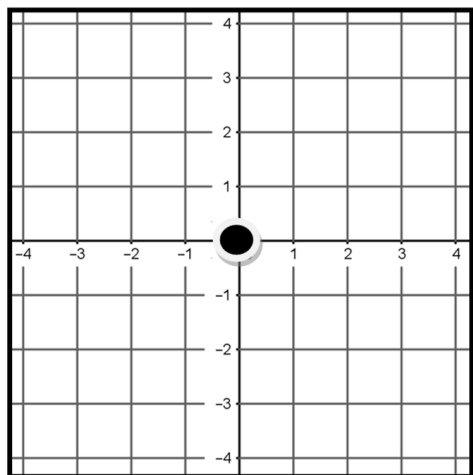


Table Work Reversed

Vocabulary

26

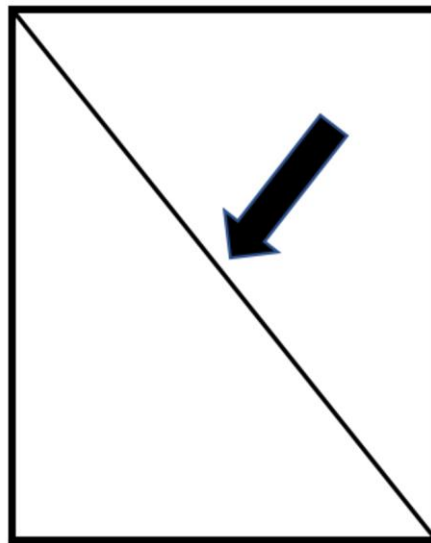
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One Up

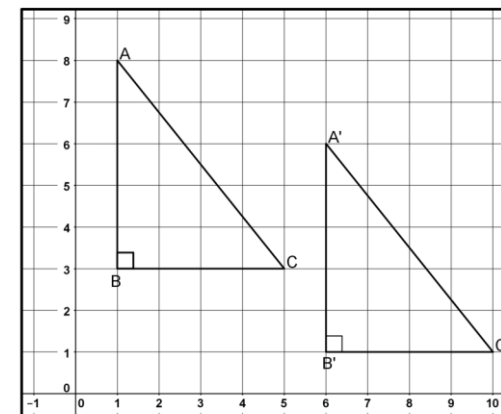
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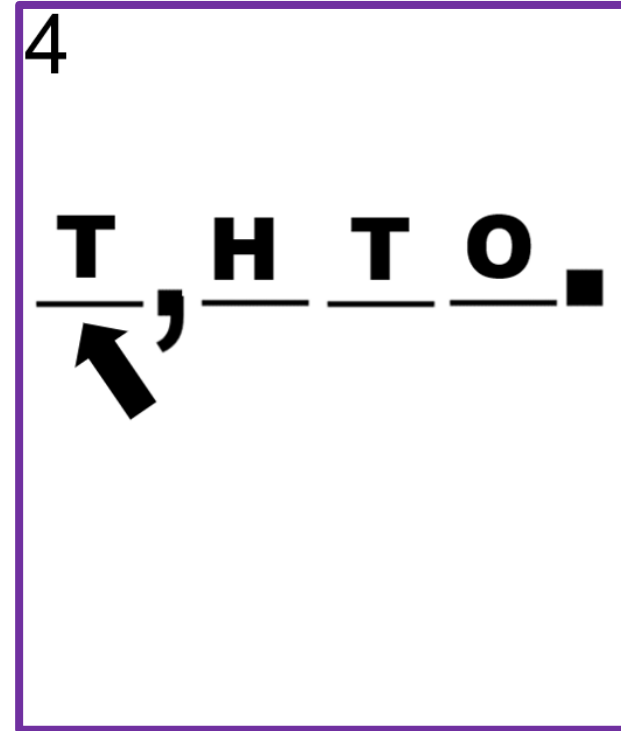
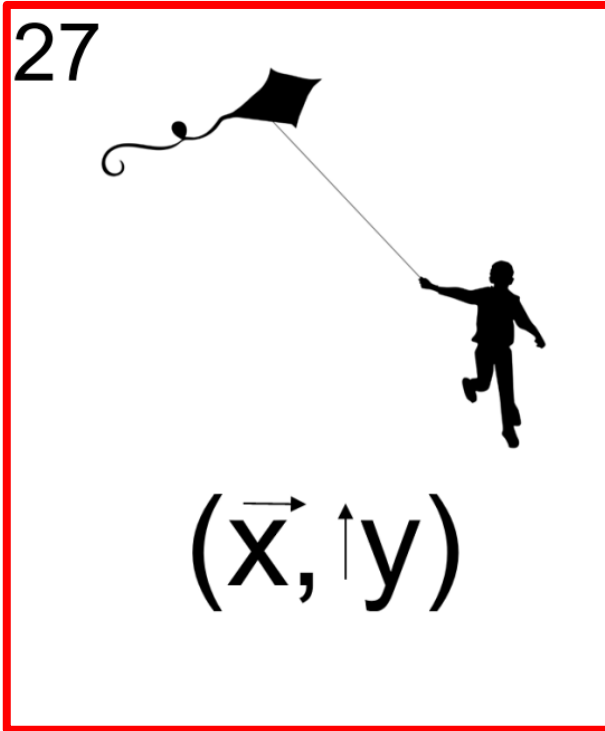
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Vocabulary

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What's the question?

Vocabulary

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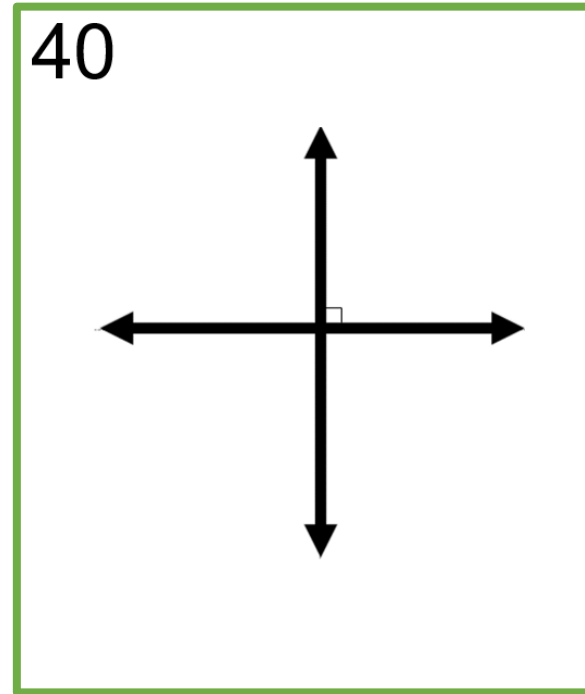
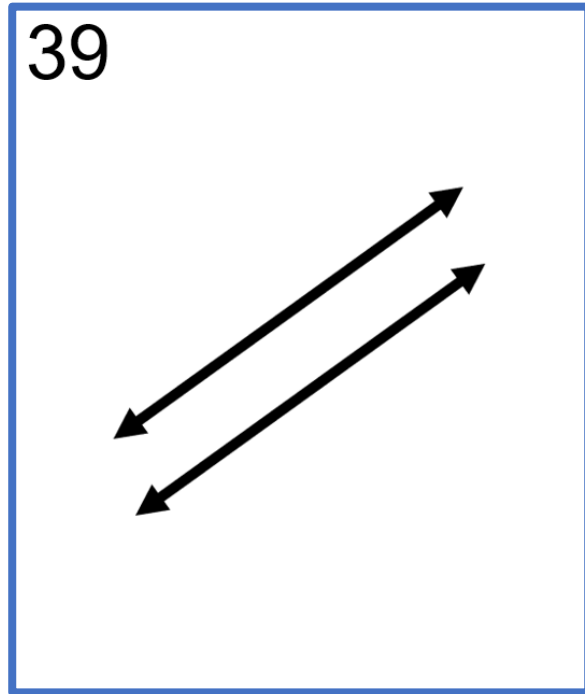
even less than
dozen
trapezoid rhombus
odd greater than



Flyswatter

Vocabulary


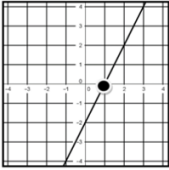
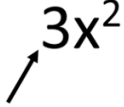
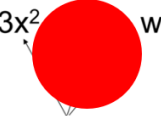
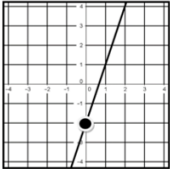
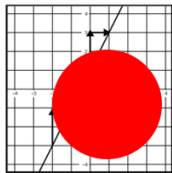
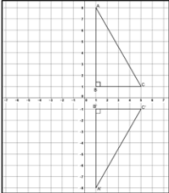
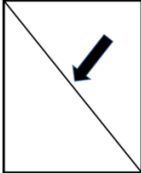
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Know the Difference

Vocabulary

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17 SpiralEd Solutions  5, 2, 1	9 SpiralEd Solutions  (1, 0)	13 SpiralEd Solutions  $3x^2$
15 SpiralEd Solutions  $3x^2$ w	14 SpiralEd Solutions $y = kx$	10 SpiralEd Solutions  (0, -2)
4 SpiralEd Solutions  $m = 2$	24 SpiralEd Solutions 	21 SpiralEd Solutions 

BINGO

Vocabulary

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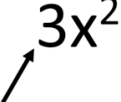
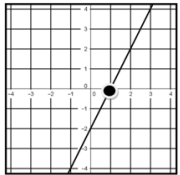
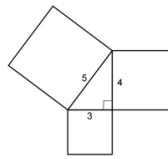
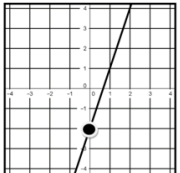
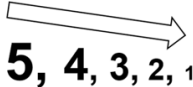
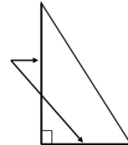
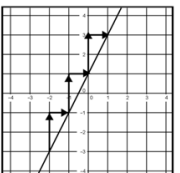

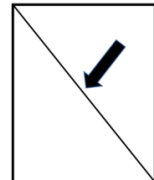
1 Coefficient

25
 $3x^2$

Wall Work

Vocabulary

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13  $3x^2$	9  $(1, 0)$	34 
10  $(0, -2)$	17  $5, 4, 3, 2, 1$	36 Not the hypotenuse 
4  $m = 2$	35 The side opposite the right angle. 	21 

Twenty Questions

Vocabulary

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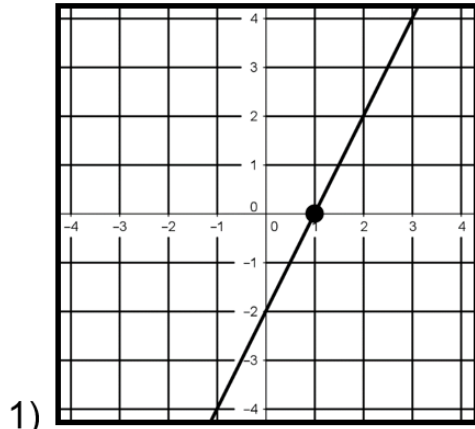
Accountability....

- Cumulative
- Formative
- Summative
- Increasing depth



Vocabulary

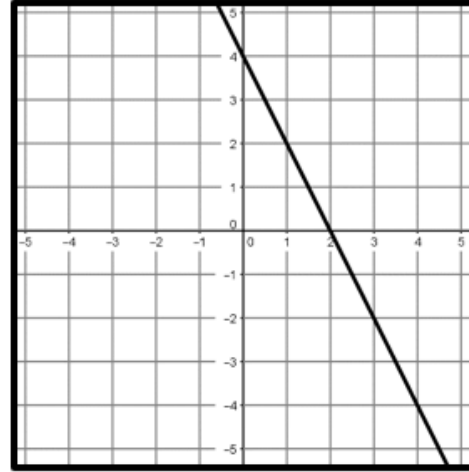
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Which term best describes the point?

- A. y-intercept
- B. x-intercept
- C. vertex
- D. negative slope

1)



What is the x-intercept?

- A (2, 0)
- B (0, 2)
- C (4, 0)
- D (0, 4)

12)

$$y = m\overset{\downarrow}{x} + b$$

- A. x-axis
- B. x-variable
- C. x-intercept
- D. S-integer

Vocabulary

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Intervention

Resource

ESL

They're everywhere!

Parents

Dyslexia

PALS

Sub Folder

Watchdogs

Vocabulary

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Learning how to learn: for math and for life.



**Be an active
participant in
your own
rescue.**

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Vocabulary +
Wall Work +
Spirals =

Spiraling to Success



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