

CC COURSE 1 ETOOLS

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General eTools

Algebra Tiles (CPM)

This tutorial describes how to use the Algebra Tiles including additional features.

Click on the link below to access eTool.

[Algebra Tiles \(CPM\)](#)

1. The top bar has three main parts: Pen & Paper Icon, '?' Icon, and the Arrow Icon.

1. Select the Pen & Paper Icon to:

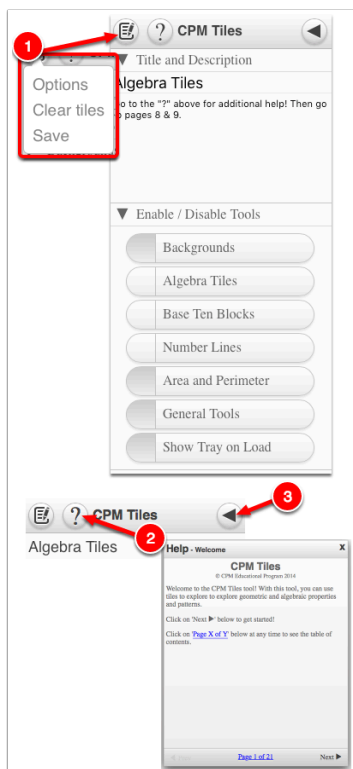
Options - Add Title and Description and Enable/Disable Tools.

Clear Tiles - This will remove all the tiles that are in the tile area.

Save - This will save all the changes made.

2. Select the '?' icon for directions.

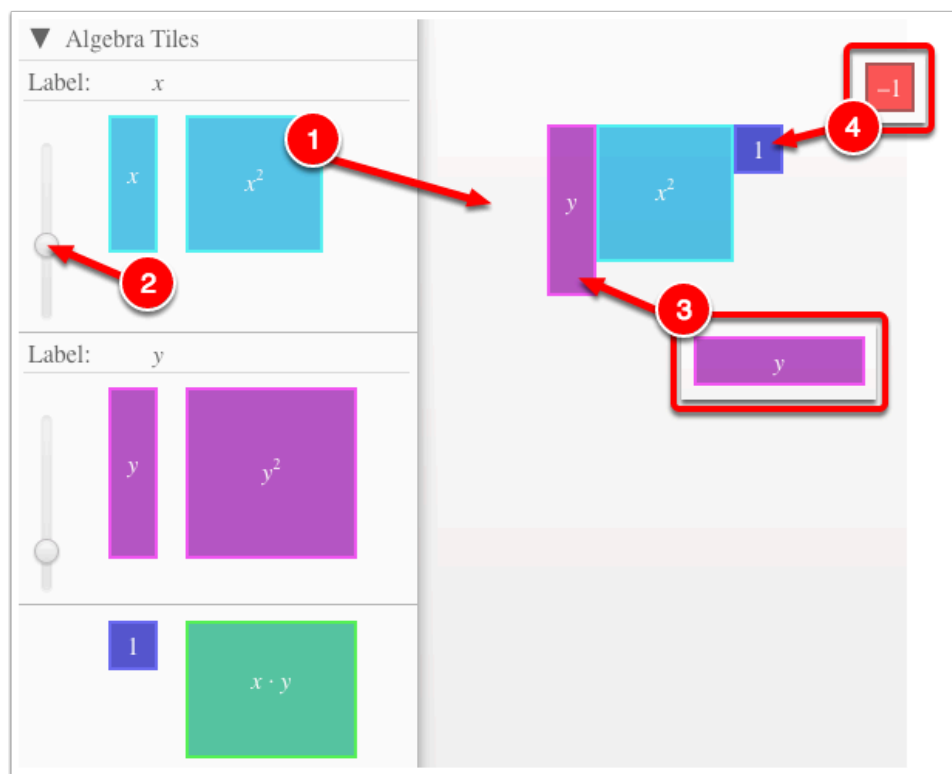
3. Select the Arrow Icon at the right to open and close the tray.



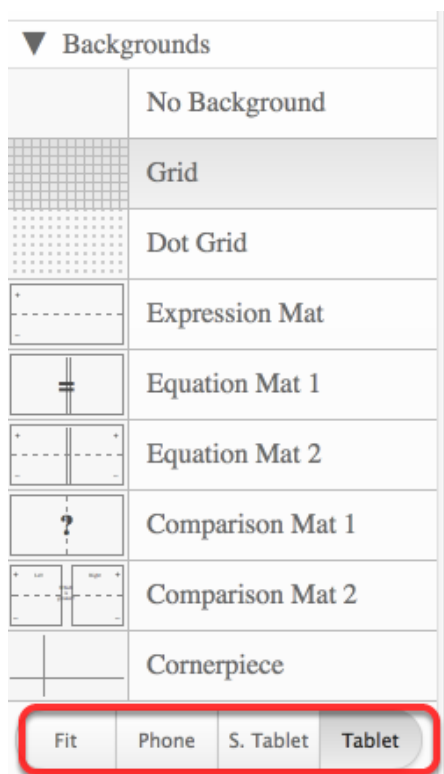
2. Drag tiles from the tray at the left to the display area at the right.

1. Select one of the tiles and drag it to the tile area.

2. Use the sliders in the tray to change the size of the tiles.
 3. Double click tiles to change orientation (horizontal/vertical).
 4. Click on a tile once to change the sign (+ -).
- Note: The color of the tile will turn to red for negative sign.

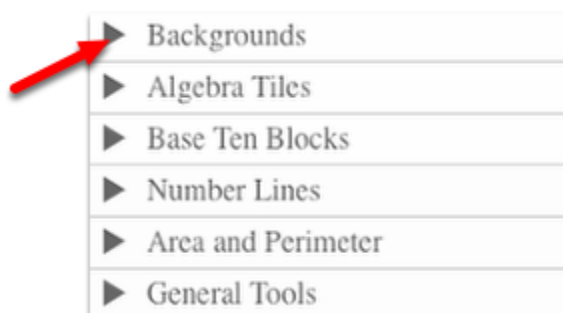


3. Choose from a variety of different mats. Also choose from a variety of sizes to fit on various devices.



4. Choose from a variety of different tiles:

- Click the arrow next to the tool to view/hide the options for each tool.



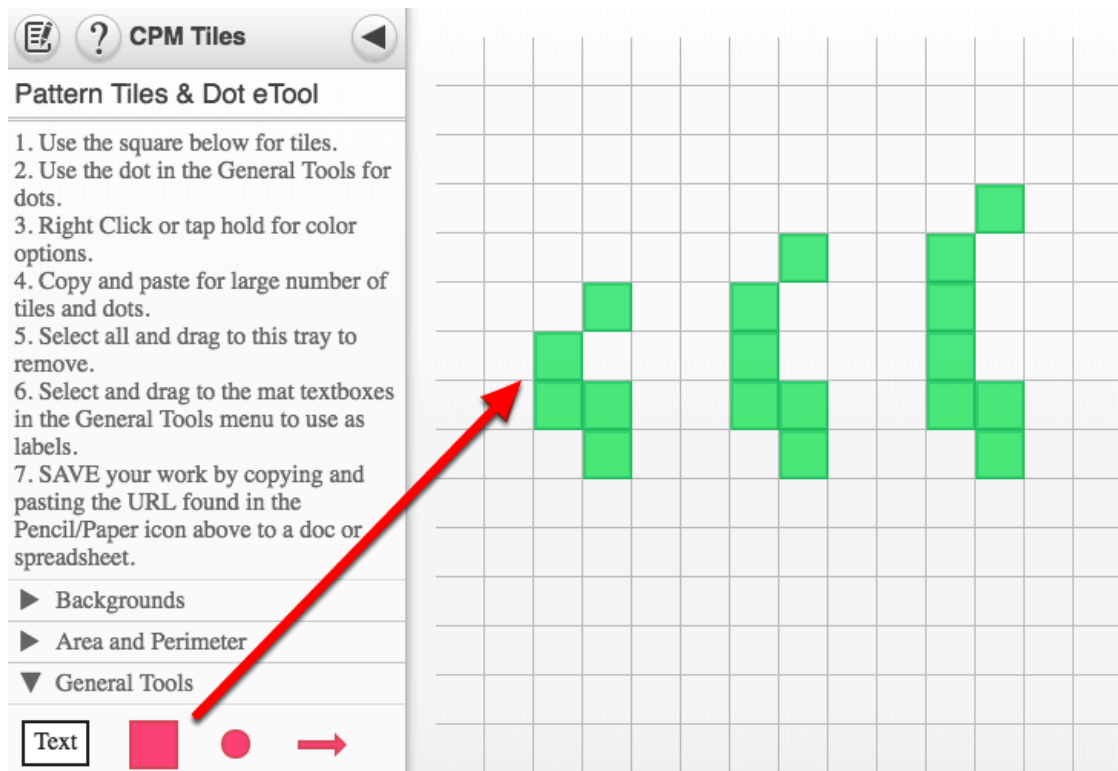
Pattern Tile & Dot Tool (CPM)

Click on the link below.

[Pattern Tile & Dot Tool](#)

1. Drag tiles from the tray to the Display area.

- Add tiles and copy and paste them to the display area.
- Select all tiles and drag to the tray to remove the tiles.



2. Textboxes and Dots

- Located in the General Tools
- Drag out and choose border/no border and color.
- Double click to rotate.
- Click to add text.

CPM Tiles

Pattern Tiles & Dot eTool

1. Use the square below for tiles.
2. Use the dot in the General Tools for dots.
3. Right Click or tap hold for color options.
4. Copy and paste for large number of tiles and dots.
5. Select all and drag to this tray to remove.
6. Select and drag to the mat textboxes in the General Tools menu to use as labels.
7. SAVE your work by copying and pasting the URL found in the Pencil/Paper icon above to a doc or spreadsheet.

Backgrounds

Area and Perimeter

General Tools

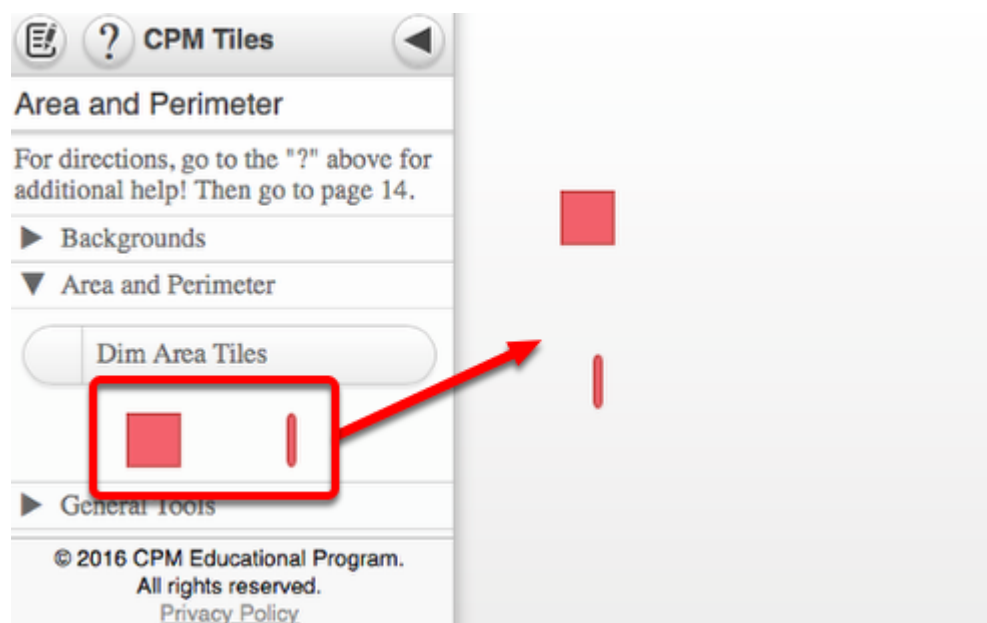
Text

Area and Perimeter (CPM)

Click on the link below to access the eTool.

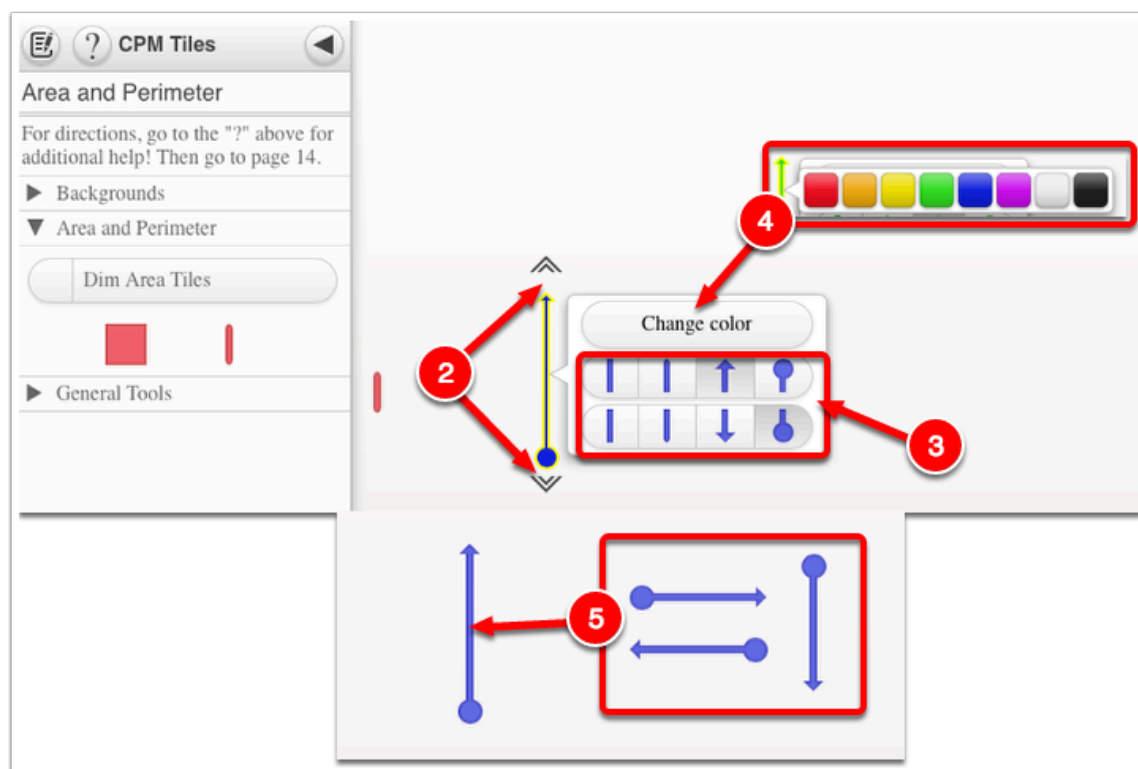
[Area and Perimeter \(CPM\)](#)

1. Drag the tiles and toothpicks to the display area. Double click toothpicks to rotate.

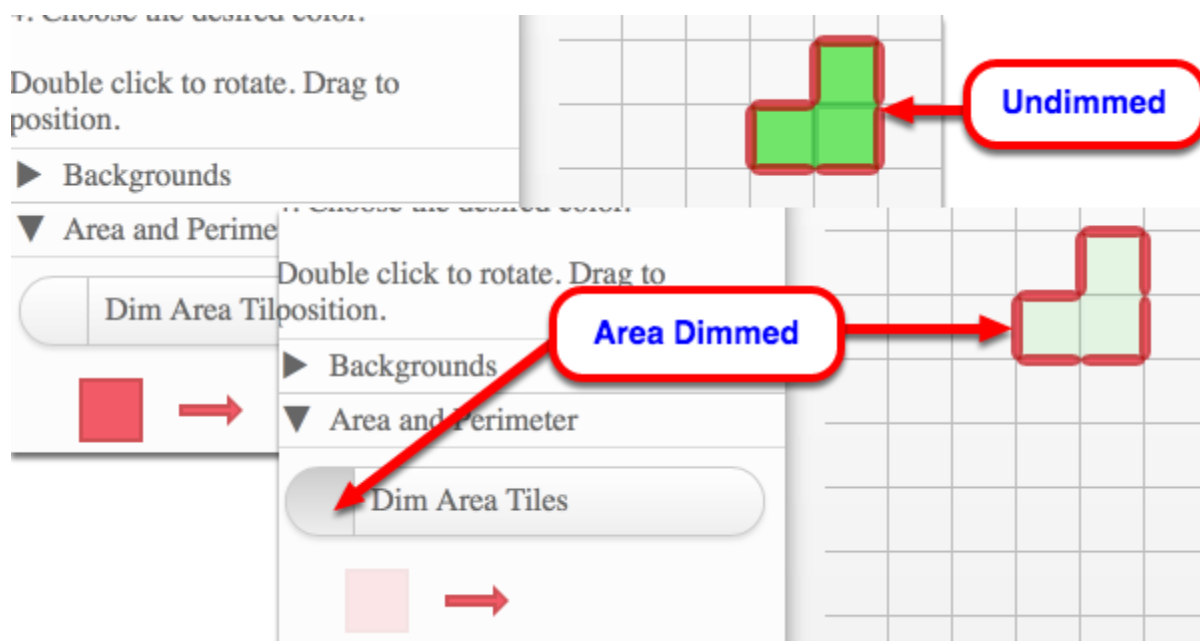


2. Toothpicks Settings

1. Click the toothpick and hold to view the toothpick settings.
2. Click one of the arrows at the end of toothpick to adjust the length.
3. Select the tip you want to use.
4. Click the "Change color" button to change the color of the toothpick.
5. Double click the toothpick to rotate.
6. Click and drag to move the toothpick.



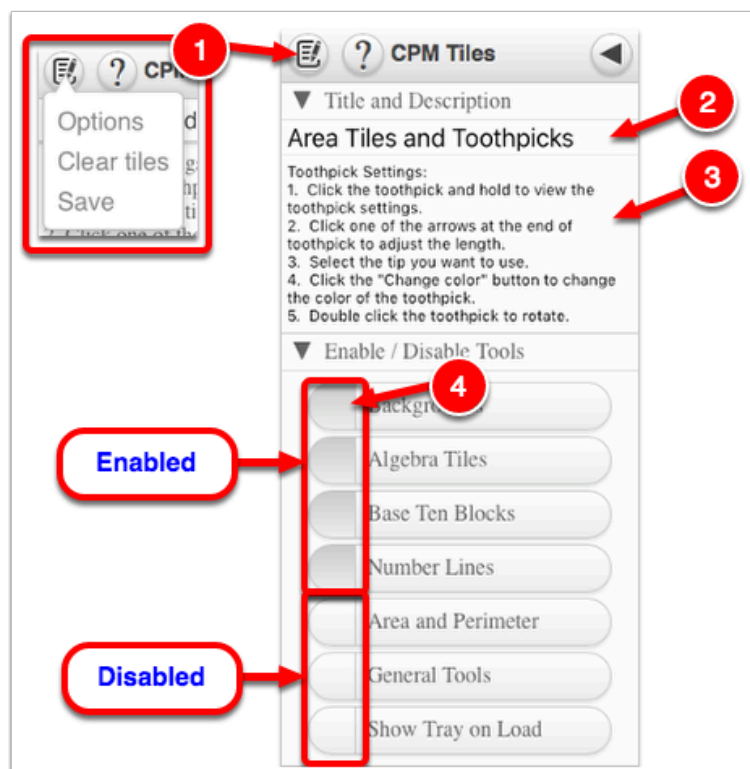
3. Dim Area showing the perimeter more sharply.



4. Explore the Options Menu:

1. Click the Paper & Pen Icon and select 'Options'.
2. Add a title.
3. Add description.

4. Click the button on the left of each tool name to enable/disable.



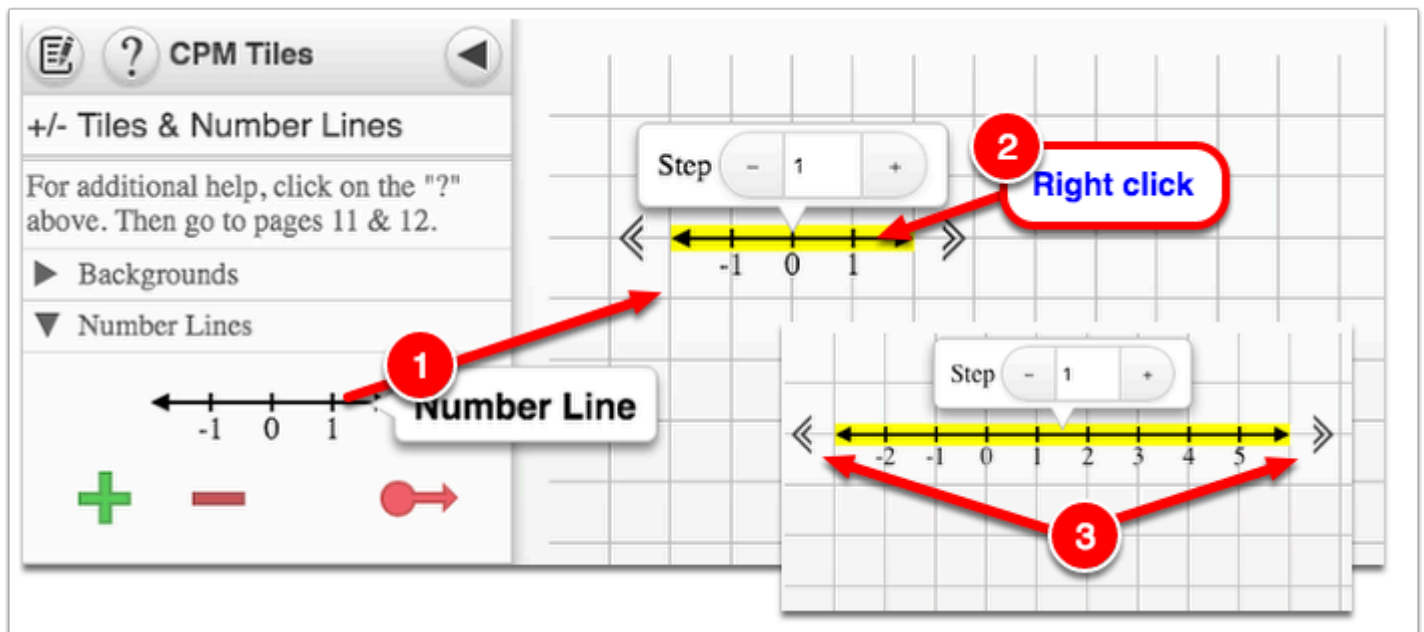
+/- Tiles & Number Lines (CPM)

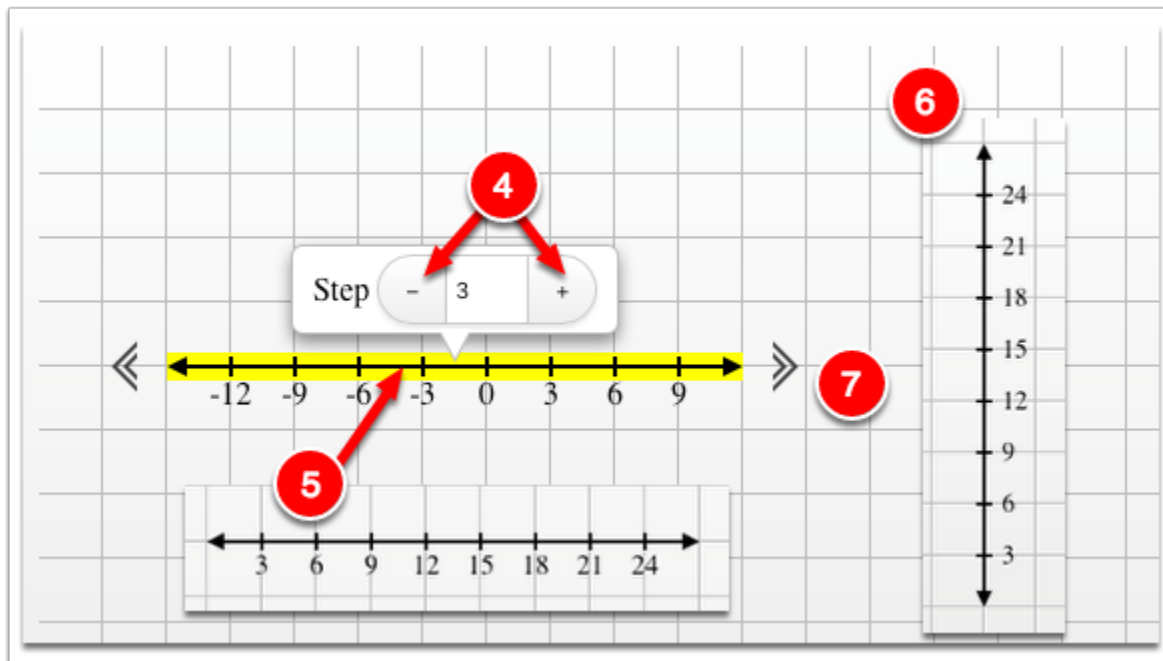
Click on the link below to access the eTool.

[+/- Tiles & Number Lines \(CPM\)](#)

Number Line:

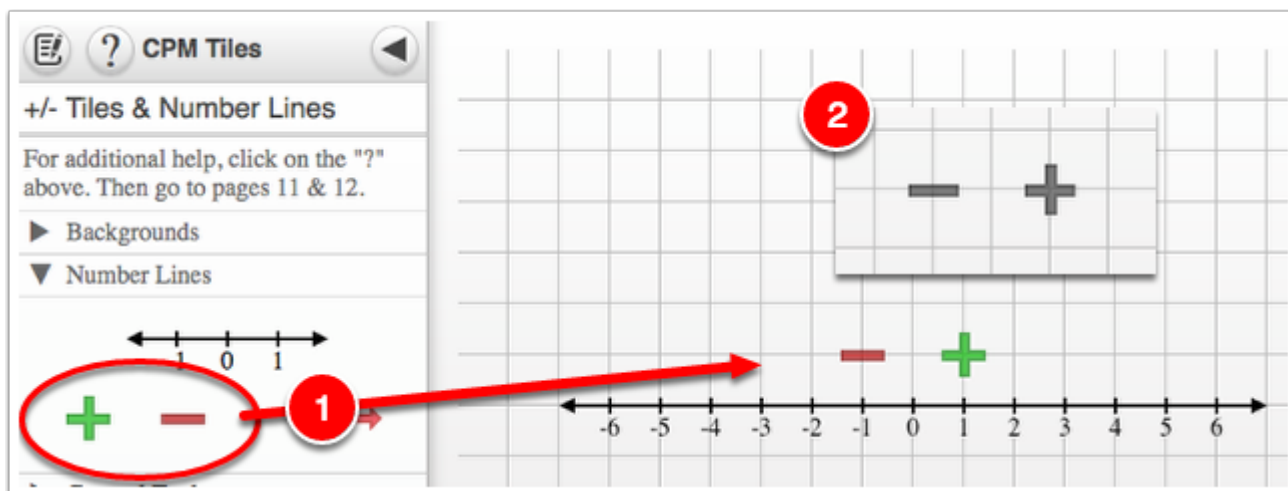
1. Click the Number Line icon and drag it to the display are.
2. Right click on the Number Line to display and adjust the settings.
3. Click one of the arrows at the end of the Number Line to adjust the length.
4. Click the '+' or '-' to adjust the step.
5. Drag the number line to change the position of the numbers.
6. Double click the Number Line to rotate.





+/- Tiles:

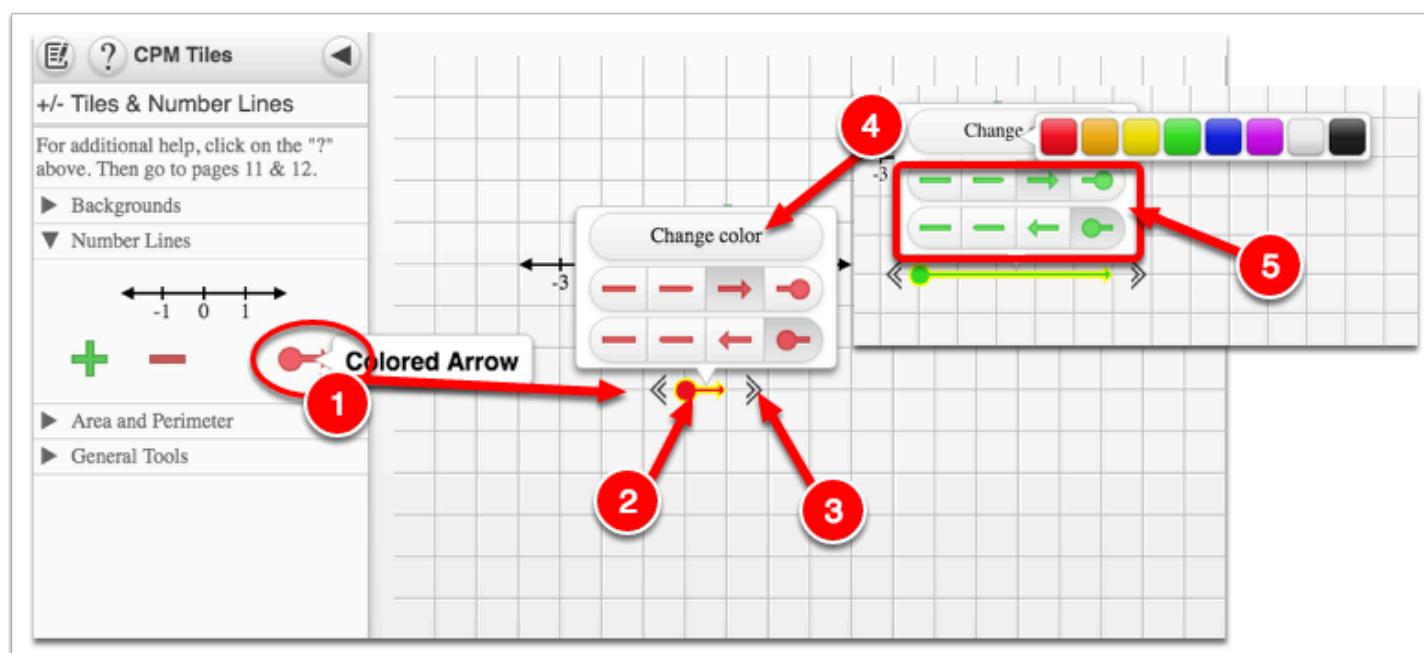
1. Click the '+' or '-' tiles and drag it to the display area.
2. Click the '+' or '-' to change its color to gray.



Colored Arrow:

1. Click the 'Colored Arrow' icon and drag it to the display area.
2. Click on the 'Colored Arrow' and hold -OR- right click to view the settings.
3. Click one of the arrows at the end of the icon to adjust the length.
4. Click the 'Change color' button to change the color of the toothpick.
5. Select the tip you want to use.

6. Double click the 'Colored Arrow' icon to rotate.
7. Click and drag the 'Colored Arrow' icon to move.



Base Ten Blocks (CPM)

Use this tool for percents and counting out of one hundred.

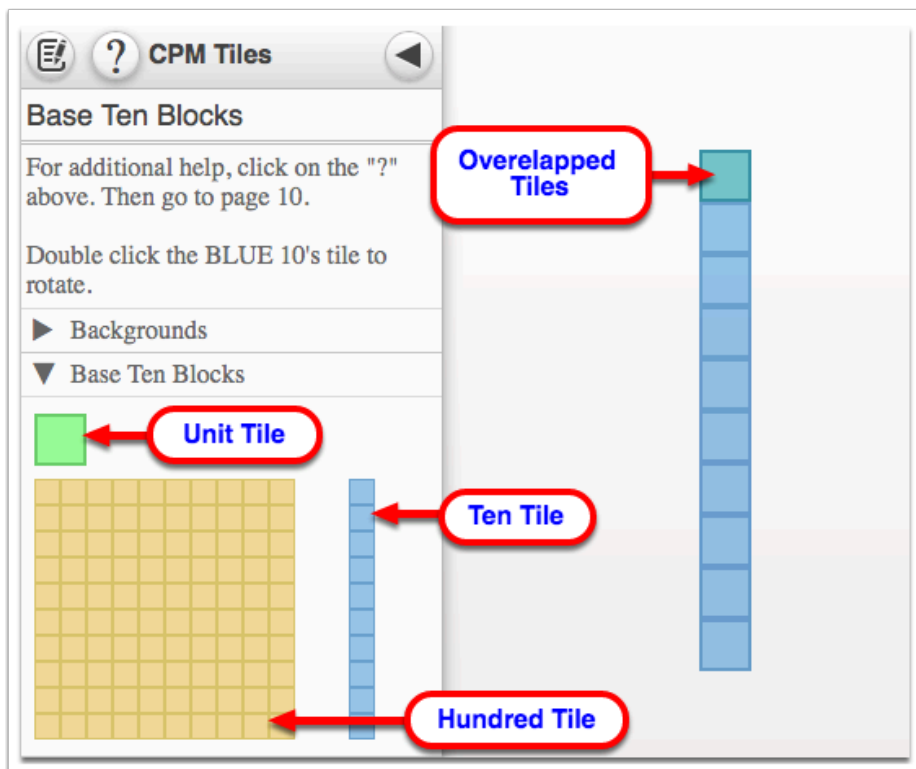
Click on the link below to access the eTool.

[Base Ten Blocks \(CPM\)](#)

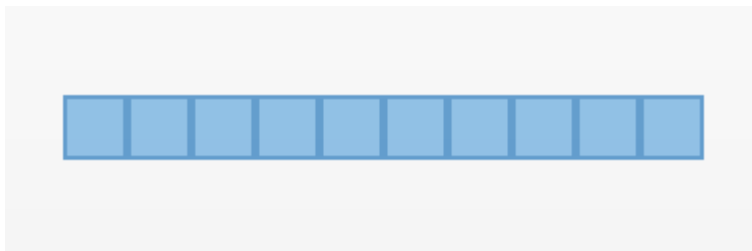
1. Drag Base Ten Blocks from the tray to the display area.

- Unit Tile
- Ten Tile
- Hundred Tile

Notes: Tiles can be overlapped.
Tiles will snap to the grid.



2. Double click to rotate.



3. Add text.

1. Click the arrow before the 'General Tools' to view.
2. Click the Text Box and drag it to the display area.
3. Click the 'T_' icon to add/remove text border.

Note: If the Text Box settings do not display automatically, right click on the Text box.

4. Choose the font color you want to use.
5. Double click the Text Box to rotate.

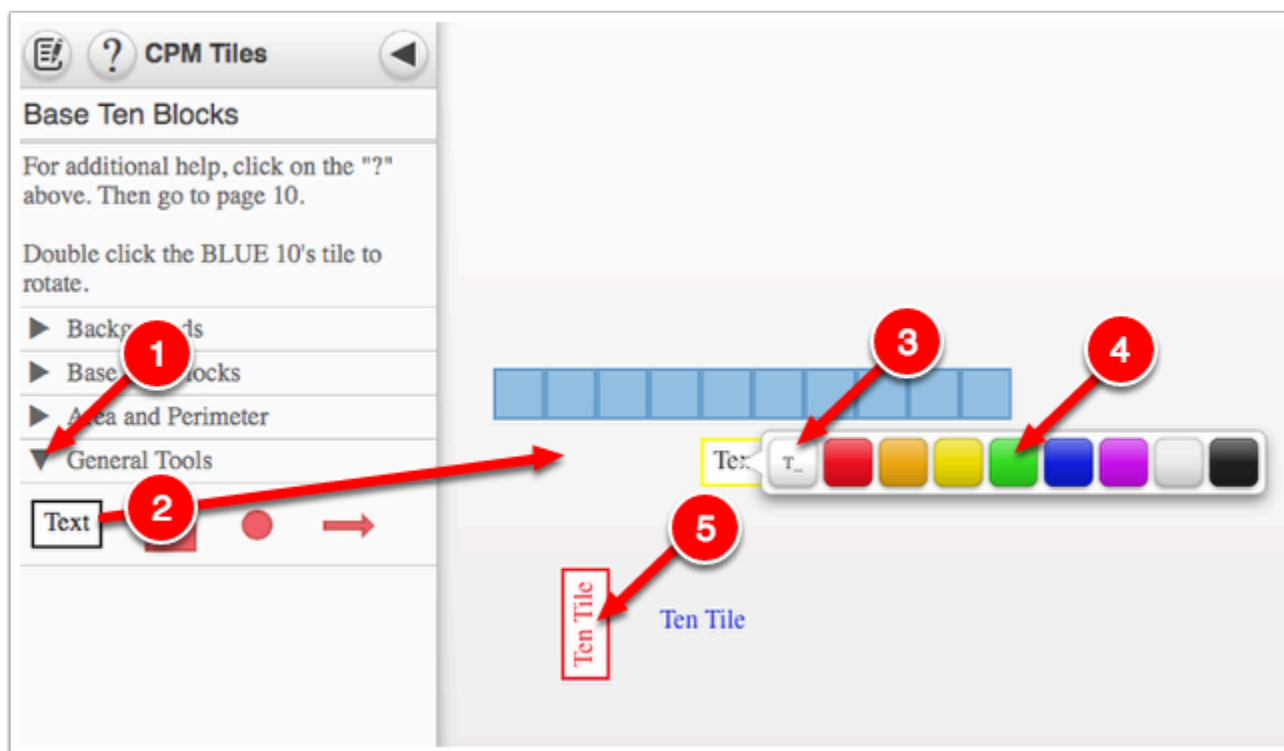


Table Tool (CPM)

Click on the link below to access the eTool.

[CPM Table eTool](#)

1. CPM Table eTool

- Find patterns
- Highlight cells
- Highlight rows

Table © 2016 CPM Educational Program. All rights reserved.												Directions	Reset	Save	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30
3	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
4	4	8	12	16	20	24	28	32	36	40	44	48	52	56	60
5	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75
6	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90
7	7	14	21	28	35	42	49	56	63	70	77	84	91	98	105
8	8	16	24	32	40	48	56	64	72	80	88	96	104	112	120
9	9	18	27	36	45	54	63	72	81	90	99	108	117	126	135
10	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
11	11	22	33	44	55	66	77	88	99	110	121	132	143	154	165
12	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180
13	13	26	39	52	65	78	91	104	117	130	143	156	169	182	195
14	14	28	42	56	70	84	98	112	126	140	154	168	182	196	210
15	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225

2. Highlight

- Click on a row or column and highlight.
- Click on a cell and choose the color.

Highlight column

Clear cell

Clear column

Table
© 2016 CPM Educational Program. All rights reserved.

	1	2	3	4	5	6	7	8	9
1	1	2	3	4	5	6	7	8	9
2	2	4	6	8	10	12	14	16	18
3	3	6	9	12	15	18	21	24	27
4	4	8	12	16	20	24	28	32	36
5	5	10	15	20	25	30	35	40	45
6	6	12	18	24	30	36	42	48	54
7	7	14	21	28	35	42	49	56	63

3	4	5	6	7	8	9
3	4	5				
6	8	10				
9	12	15				
12	16	20				
15	20	25	30	35	40	45
18	24	30	36	42	48	54
21	28	35	42	49	56	63

Clear

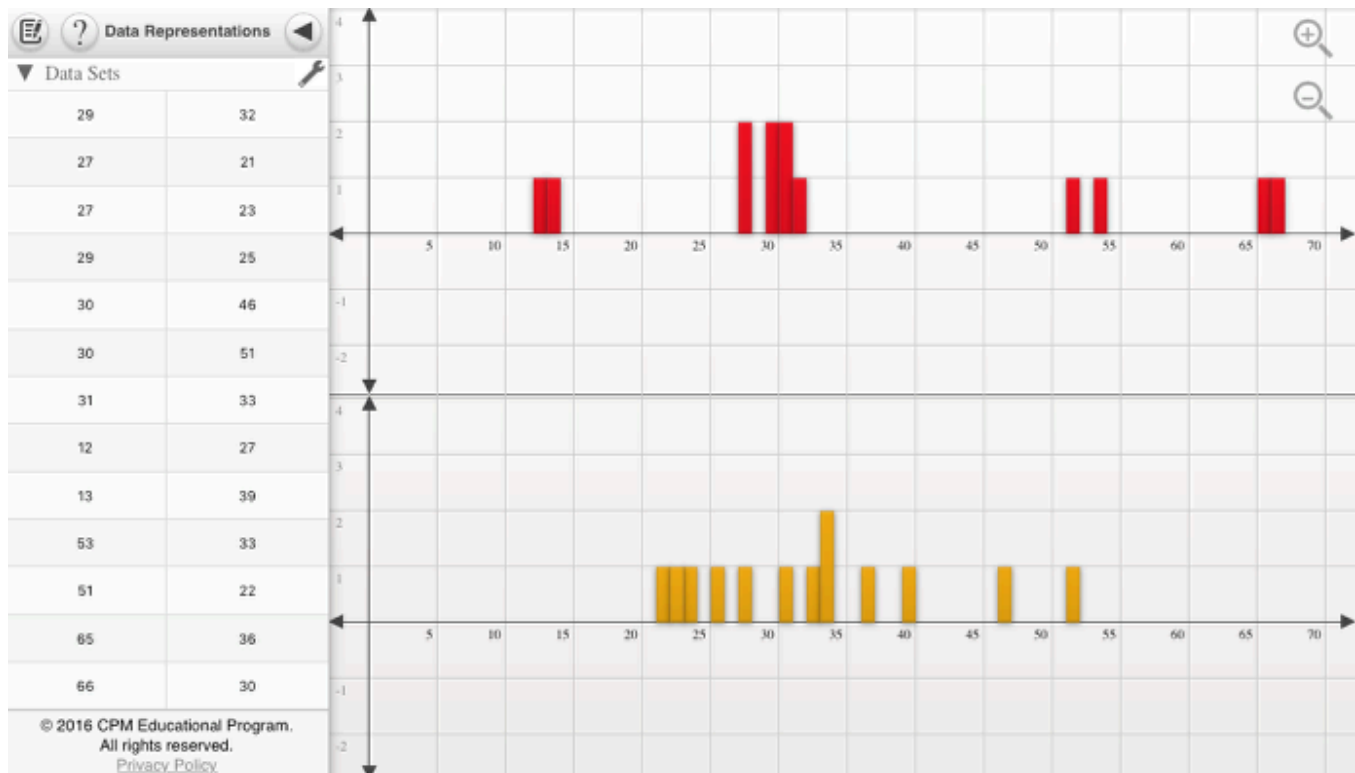
Data Representations (CPM)

Click the link below for “CPM Data Representations”

[CPM Data Representations](#)

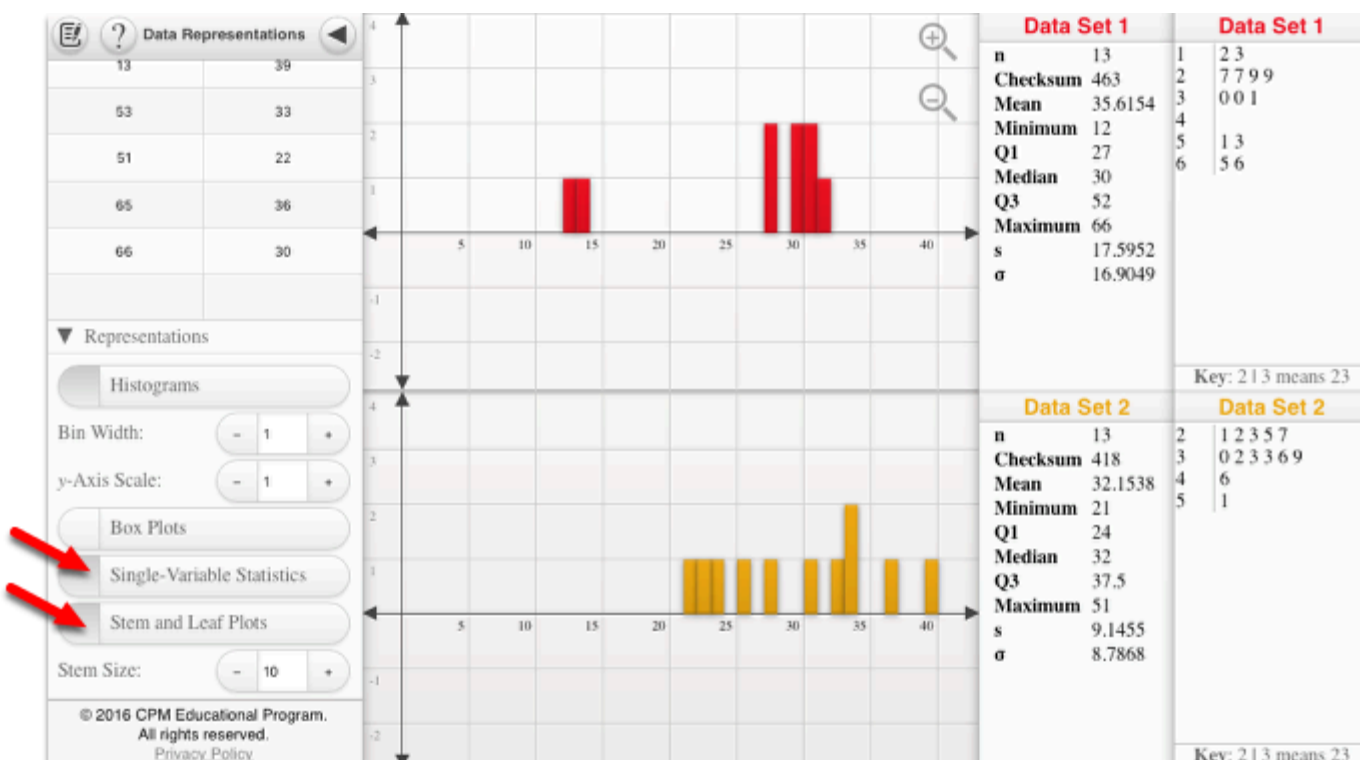
1. CPM Data Representations:

Type in up to two sets of data into the columns under the Data Sets tab. Click the wrench to sort or change the graph color. Click the Data Sets arrow to hide the data.



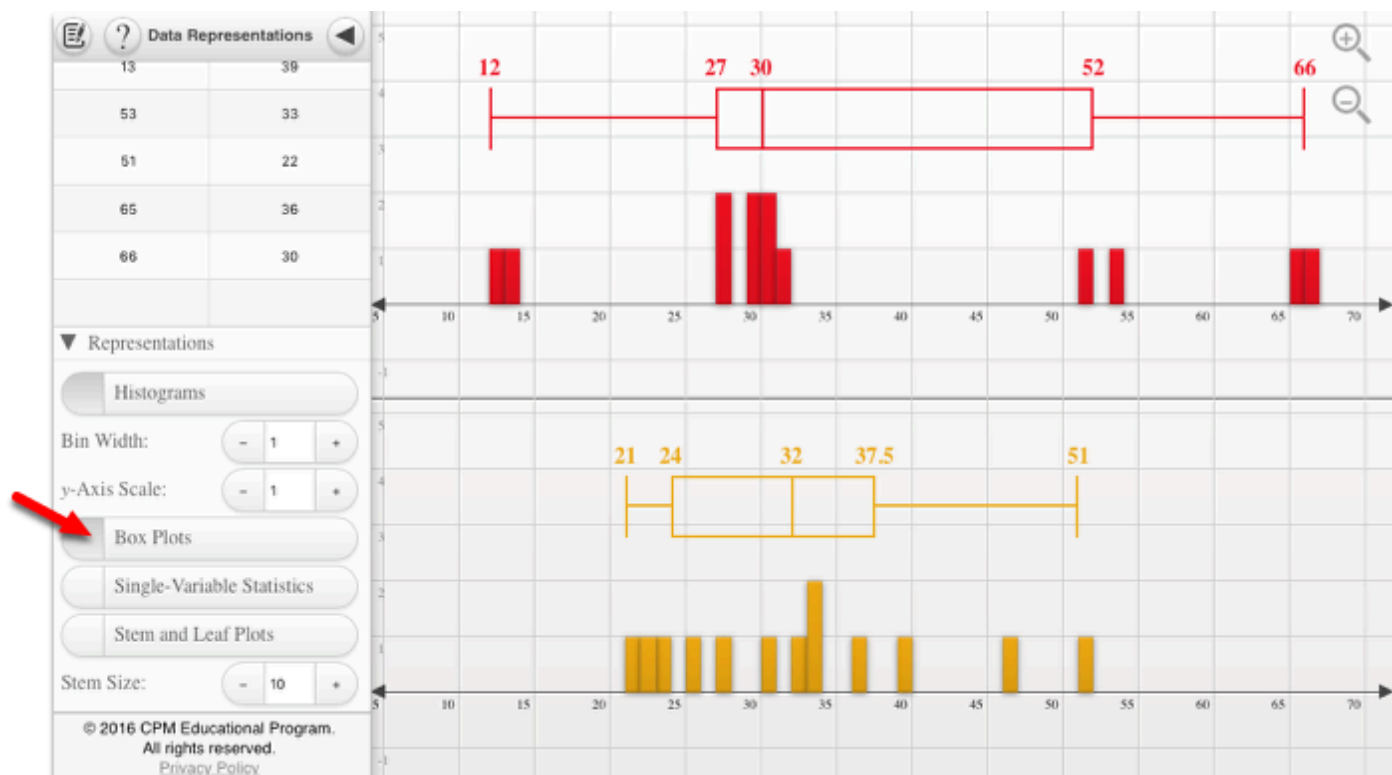
2. Single-Variable Statistics or the Stem and leaf Plots:

When choosing Single-Variable Statistics or the Stem and Leaf Plots from the left tray, the data/plot(s) show from the right. Unclick from the left to close the trays at right.



3. Box Plots

Note: Use the zoom in and out buttons at the upper right to position the histograms in a friendly window. On a computer, you can use the mouse wheel. On a tablet, use two fingers to pinch or spread data.



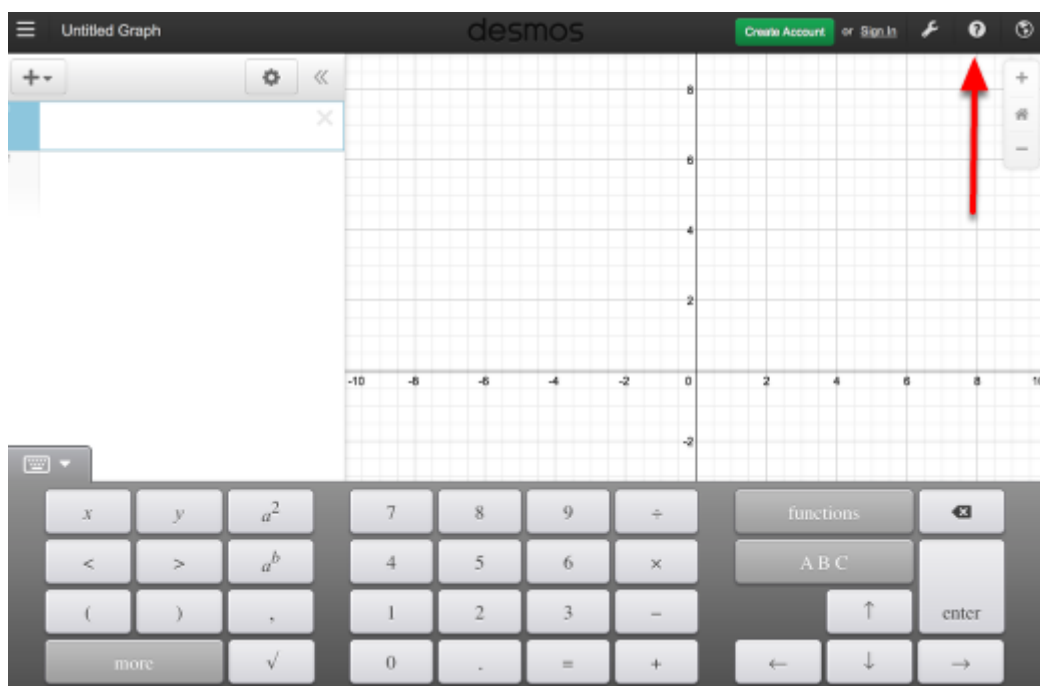
Desmos Graphing Calculator

This free graphing calculator allows students to create a free account to save all of their graphs, animations, and projects created.

Click on the "Desmos Graphing Calculator" link below.

[Desmos Graphing Calculator](#)

1. Click on all of the buttons. Try it out! For extra help, click the "?".



2. Click on the interactive tours below for help to create:

[Sliders](#)

[Tables](#)

[Advanced Tables](#)

[Restrictions](#)

3. The interactive tours will NOT let you make a mistake! Try the links above!

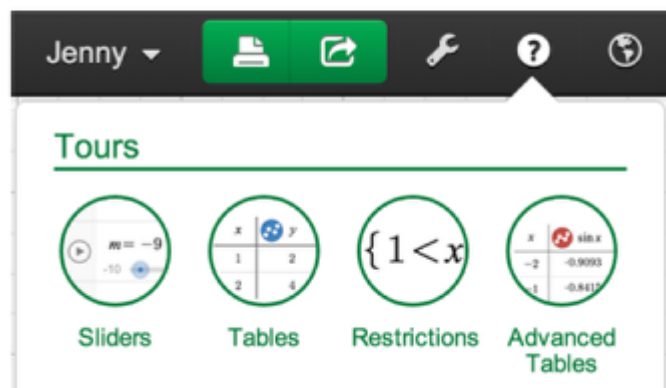
Interactive Tours



Team Desmos

posted this on December 29, 2013 22:13

Try one (or all!) of the interactive tours to learn more about sliders, tables, restrictions, and more:



4. Need additional help? Watch these very short excellent videos!

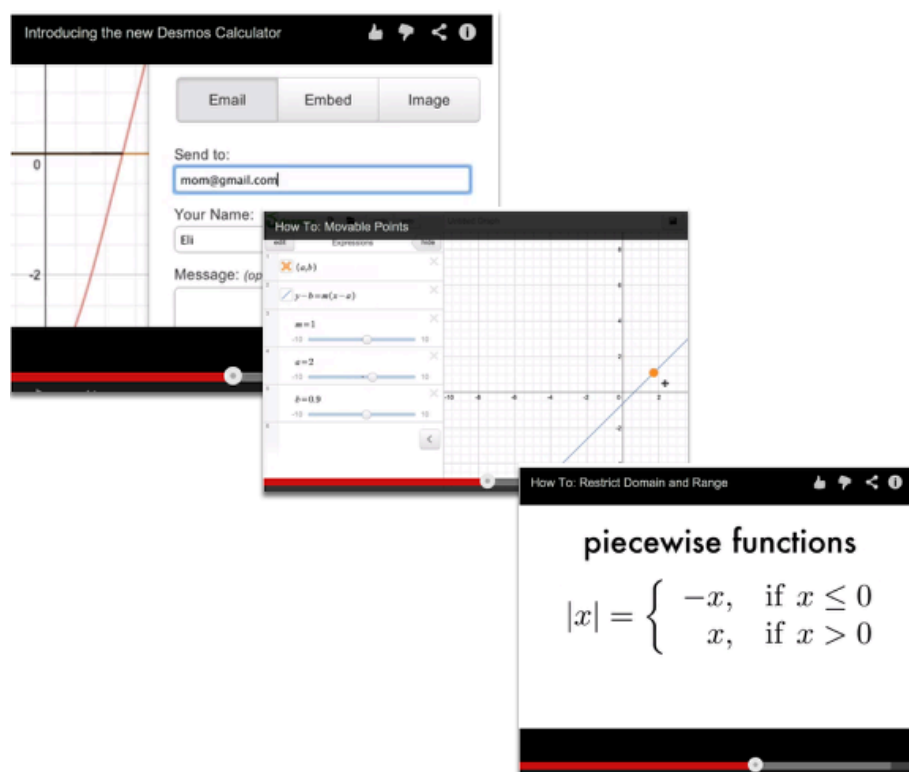
[Desmos Introduction](#)

[Moveable Points](#)

[Graph Inequalities](#)

[Piece-Wise Function](#)

5. The video links will help you with many of your graphing projects!



6. If you still need help, check out Desmos "Knowledge Base"

[Desmos Knowledge Base](#)



Chapter 1

CC1 1.1.2: 1-7 Figure Student eTools (CPM)

Tools for 1-7 Figures A, B, C, D, and E are included.

Click the links below for the “1-7 Figure Student eTools (CPM).”

[1-7 Figure A Student eTool\(CPM\),](#)
[1-7 Figure B Student eTool\(CPM\),](#)
[1-7 Figure C Student eTool\(CPM\),](#)
[1-7 Figure D Student eTool\(CPM\),](#)
[1-7 Figure E Student eTool\(CPM\)](#)

1. Use the facts below and your team to assign each fact to a Figure.

- Each team member clicks on one of the figure number above not showing it to anyone else.
- By describing your figure to others in your team, decide which fact goes with each figure.

<p>Fact 1:</p> <p>The figure contains 8 more toothpicks than tiles.</p>	<p>Fact 2:</p> <p>The figure has 2 more toothpicks than twice the number of tiles.</p>	<p>Fact 3:</p> <p>The figure contains half as many tiles as toothpicks.</p>
<p>Fact 4:</p> <p>The figure contains 12 toothpicks.</p>	<p>Fact 5:</p> <p>The figure has an even number of both tiles and toothpicks.</p>	

2. Collaborative Learning Expectations

- T** Together, work to answer questions.
- E** Explain and give reasons.
- A** Ask questions and share ideas.
- M** Members of your team are your first resource.
- S** Smarter together than apart.

3. CC1 1-7 Figure A Student eTool:

CPM Tiles

CC1 1-7 Figure A Student eTool

1. Drag toothpicks to the figure to outline the perimeter.
2. Double click a toothpick to change its direction.
3. When counting the toothpicks for the perimeter, change the direction of the first toothpick to remember where you started.

Area and Perimeter

4. CC1 1-7 Figure B Student eTool:

CPM Tiles

CC1 1-7 Figure B Student eTool

1. Drag toothpicks to the figure to outline the perimeter.
2. Double click a toothpick to change its direction.
3. When counting the toothpicks for the perimeter, change the direction of the first toothpick to remember where you started.

Area and Perimeter

5. CC1 1-7 Figure C Student eTool:

CPM Tiles

CC1 1-7 Figure C Student eTool

1. Drag toothpicks to the figure to outline the perimeter.

2. Double click a toothpick to change its direction.

3. When counting the toothpicks for the perimeter, change the direction of the first toothpick to remember where you started.

▼ Area and Perimeter

6. CC1 1-7 Figure D Student eTool:

CPM Tiles

CC1 1-7 Figure D Student eTool




1. Drag toothpicks to the figure to outline the perimeter.

2. Double click a toothpick to change its direction.

3. When counting the toothpicks for the perimeter, change the direction of the first toothpick to remember where you started.


▼ Area and Perimeter

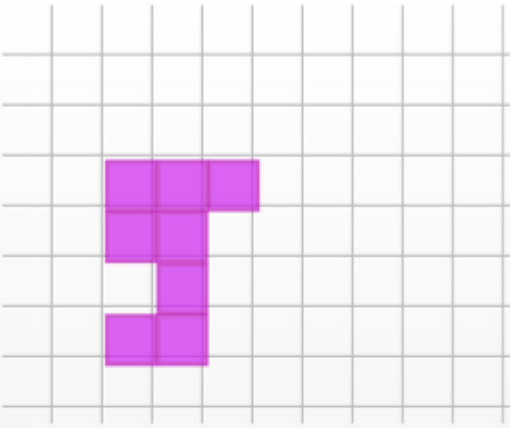
7. CC1 1-7 Figure E Student eTool:



CPM Tiles


CC1 1-7 Figure E Student eTool

1. Drag toothpicks to the figure to outline the perimeter.
2. Double click a toothpick to change its direction.
3. When counting the toothpicks for the perimeter, change the direction of the first toothpick to remember where you started.


Area and Perimeter



CC1 1.1.3: 1-15 Student eTool (CPM)

Show patterns to build from one figure # to the next consecutive figure #.

[1-15 Student eTool \(CPM\)](#)

1. CC1 1-15 Student eTool:

- Use the textbox to write the patterns you found.
- Drag dots to the display area to color code your ideas.

CPM Tiles

CC1 1-15 Student eTool

Directions: Use the dot pattern shown at right to solve each part of the problem.

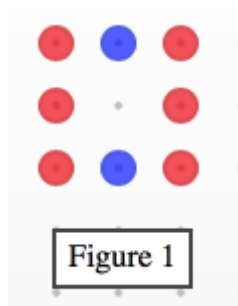
Drag the dot from below onto the grid to create Figure 4 and Figure 5.

To change the dot color, click the dot and select a color.

To change the number of grid dots, click 'Backgrounds'. Scroll to the bottom to choose device and grid option.

To SAVE your work, go to the paper/pencil icon above. Tap "SAVE". Copy and save the URL in a doc or sheet for future use.

2. One pattern might be to have three vertical dots colored red while two vertical dots are colored blue. How does this relate to the figure#?





CC1 1.1.3: 1-18 Student eTool (CPM)

Click on the "1-18 Student eTool (CPM)" link below.

[1-18 Student eTool Dots \(CPM\)](#)

1. Create figures 4 and 5 showing the pattern of growth using various colored dots.

  CPM Tiles

CC1 1-18 Student eTool

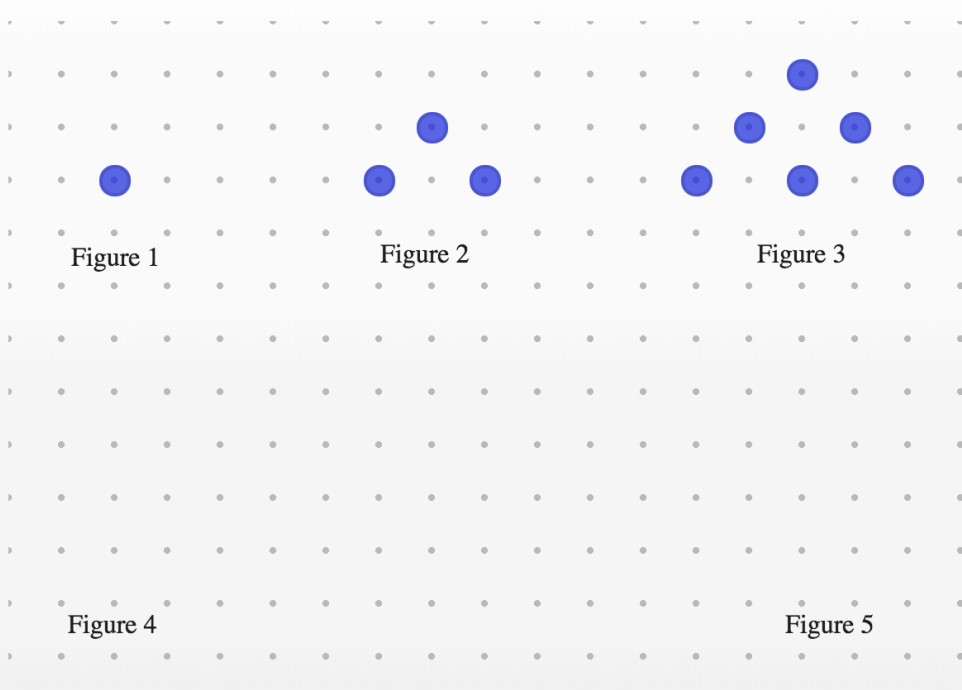
Directions: Use the dot pattern shown at right to solve each part of the problem.

Drag dots from below onto the grid to create Figure 4 and Figure 5.

To change the dot color, click the dot and select a color.

To change the number of grid dots, click 'Backgrounds'. Scroll to the bottom to choose device and grid option.

To SAVE your work, go to the paper/pencil icon above. Tap "SAVE". Copy and save the URL in a doc or sheet for future use.



CC1 1.1.4: Frog Jumping Contest Video

Click on the Video link below to view the Frog Jumping Contest.

[Frog Jumping at Calaveras County](#) 

1. Frogs are given three jumps. The frog with the longest distance wins!



CC1 1.2.2: 1-56 Student eTool (CPM)

Click on the "1-56 Student eTool (CPM)" link below.

[1-56 Student eTool \(CPM\)](#)

1. Use the tools to show various numerical ways to show the figure below. Drag the Text box to label each one.

Text Box:

- Drag to the display area.
- Click once to type in the label.
- Click twice to rotate the label.

2. Students find as many numerical ways they can draw the figure above. Below is one example.

CC1 1.2.4: 1-73 Student eTool (CPM)

Click the "1-73 Student eTool (CPM)" link below.

[1-73 Student eTool](#)

1. Fill the empty cells with the correct number by finding a pattern of numbers.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1	2	3	4	5	6	7	8	9		11	12	13	14	15
2	2	4	6	8	10	12	14	16	18		22	24	26	28	30
3	3	6	9	12	15	18	21	24	27		33	36	39	42	45
4	4	8	12	16	20	24	28	32	36		44	48	52	56	60
5	5	10	15	20	25	30	35	40	45		55	60	65	70	75
6	6	12	18	24	30	36	42	48	54		66	72	78	84	90
7	7	14	21	28	35		49	56	63		77	84	91	98	105
8	8	16	24					64	72		88	96	104	112	120
9	9	18	27	36	45		63	72	81		99	108	117	126	135
10	10	20	30	40	50	60	70	80	90		110	120	130	140	150
11	11	22	33	44	55	66	77	88	99		121	132	143	154	165
12	12	24	36	48	60	72	84	96	108		132	144	156	168	180
13	13	26	39	52	65	78	91	104	117		143	156	169		195
14	14	28	42	56	70		98	112	126		154	168		196	210
15	15	30	45	60	75	90	105	120	135		165	180	195	210	225

2. To change the color of a cell, click the cell and choose a color.



3. Answer: Students type in their answers. Click the cell again to change the color

Table © 2013 College Preparatory Mathematics, all rights reserved													Directions	Reset	Save
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30
3	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
4	4	8	12	16	20	24	28	32	36	40	44	48	52	56	60
5	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75
6	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90
7	7	14	21	28	35	42	49	56	63	70	77	84	91	98	105
8	8	16	24	32	40	48	56	64	72	80	88	96	104	112	120
9	9	18	27	36	45	54	63	72	81	90	99	108	117	126	135
10	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
11	11	22	33	44	55	66	77	88	99	110	121	132	143	154	165
12	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180
13	13	26	39	52	65	78	91	104	117	130	143	156	169	182	195
14	14	28	42	56	70	84	98	112	126	140	154	168	182	196	210
15	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225



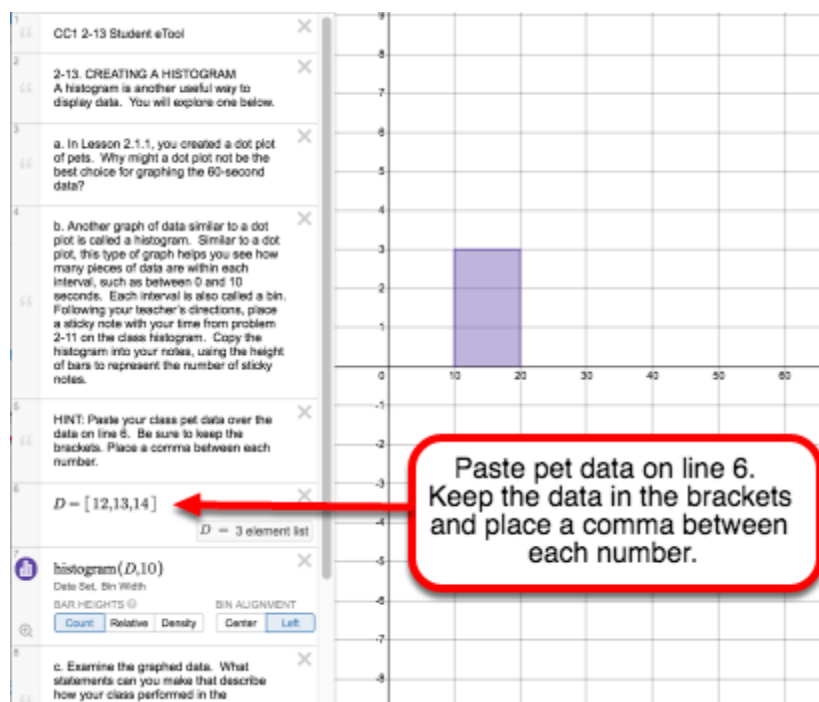
Chapter 2

CC1 2.1.2 2-13 Student eTool (Desmos)

Click the link below to access eTool.

[2-13 Student eTool \(Desmos\)](#)

To create a histogram, paste your class pet data over the data on line 6. Be sure to keep the brackets. Place a comma between each number.





CC1 2.2.2: 2-33 Student eTool (CPM)

Click the link on below for the "2-33 Student eTool (CPM)."

[2-33 Student eTool \(CPM\)](#)

The screenshot displays the "CC1 2-33 Student eTool" interface. On the left is a sidebar with a "CPM Tiles" menu containing options for Backgrounds, Area and Perimeter, and General Tools. The main workspace features two diagrams of a stepped polygon on a grid. The top diagram, labeled "First Way Diagram", shows the polygon with dimensions: a top horizontal side of 10 cm, a left vertical side of 10 cm, a bottom horizontal side of 15 cm, and a right vertical side of 4 cm. The bottom diagram, labeled "Second Way Diagram", shows the same polygon with dimensions: a top horizontal side of 10 cm, a left vertical side of 10 cm, a bottom horizontal side of 15 cm, and a right vertical side of 4 cm. To the right of the diagrams are several instructional text boxes: "Drag text boxes from the General Tools menu for your labels.", "From the Area and Perimeter Menu in the tray, drag tiles to workspace.", "Note: You can enlarge any of the tiles. Double click the labels to change them vertically.", and "Drag these textboxes to the tray to remove them from your final product." Below these instructions are two red-outlined boxes labeled "Area:" and "Perimeter:". The bottom of the interface shows a "General Tools" tray with a "Text" button, a red square, a red circle, and a red arrow.

1. Use the area tiles and color to illustrate two ways to find area.

CC1 2.2.3: 2-43a & 2-43b Student eTools (CPM)

Click on the links below.

[2-43a Student eTool](#) (CPM)

[2-43b Student eTool](#) (CPM)

2-43a Student eTool:

CPM Tiles

CC1 2-43a Student eTool

Find the area of these figures in at least two ways.

Drag the red block in the tray to the mat. Choose a color. Resize by dragging the large arrow.

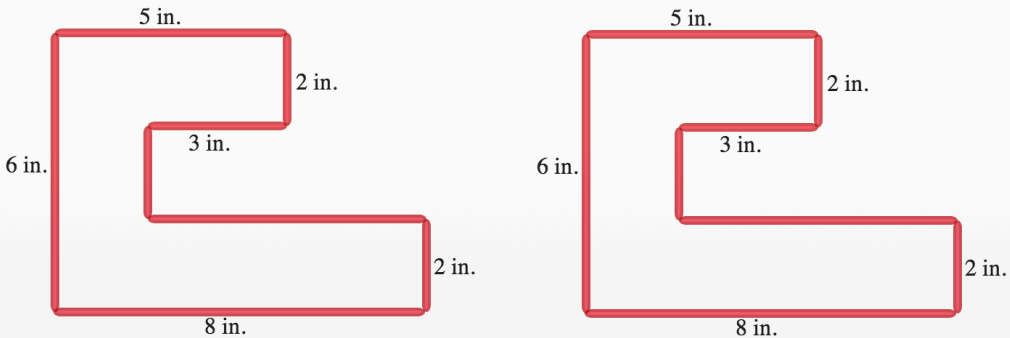
Drag textboxes from the tray to the mat to explain how you get your answers. SAVE your work by copying and pasting the URL under the Pencil/Paper icon to a doc or spreadsheet.

► Backgrounds

► Area and Perimeter

▼ General Tools

Text



The total area is:

2-43b Student eTool:

CPM Tiles

CC1 2-43b Student eTool

Find the area of these figures in at least two ways.

Drag the red block in the tray to the mat. Choose a color. Resize by dragging the large arrow.

Drag textboxes from the tray to the mat to explain how you get your answers.

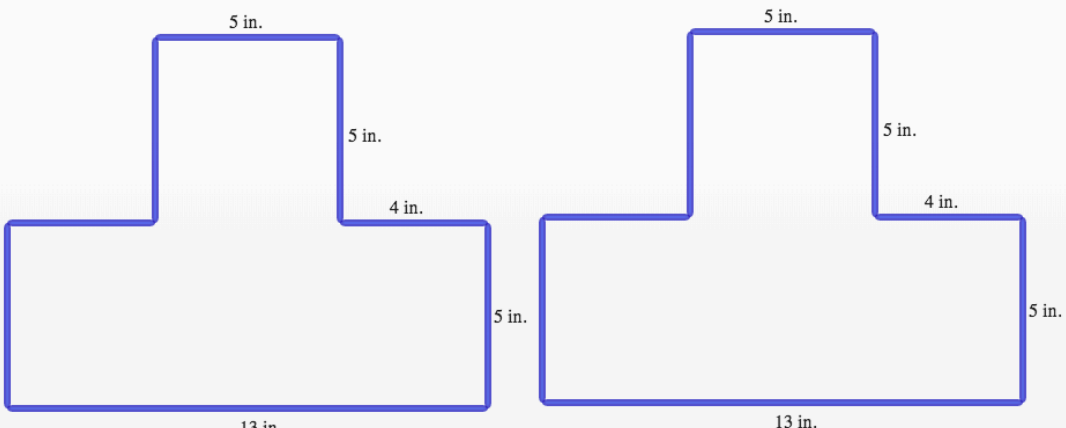
SAVE your work by copying and pasting the URL under the Pencil/Paper icon to a doc or spreadsheet.

► Backgrounds

► Area and Perimeter

▼ General Tools

Text



The total area is:



Chapter 3

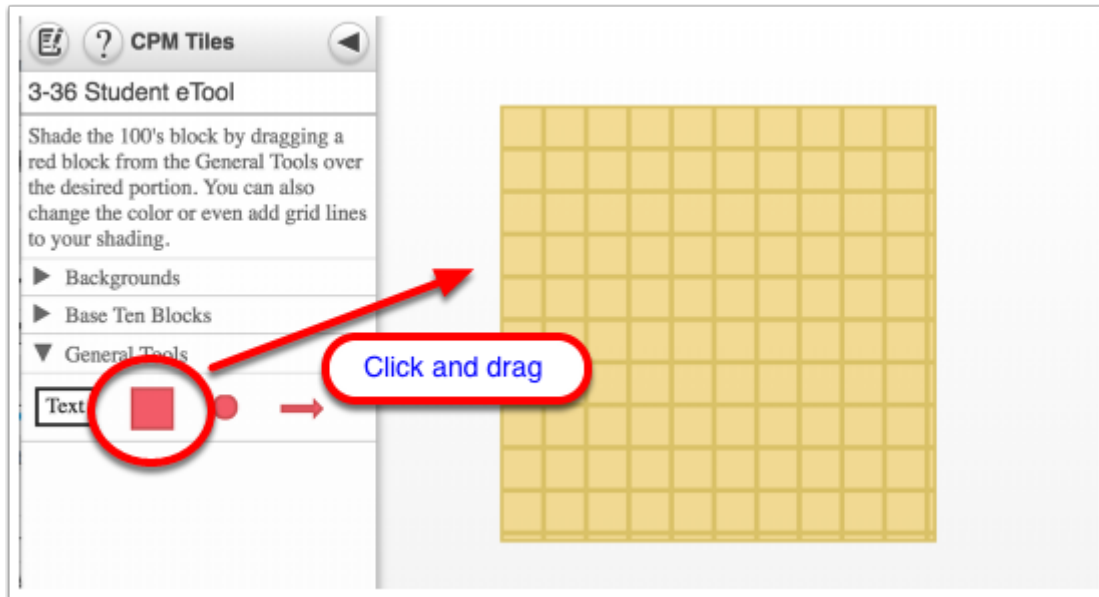
CC1 3.1.3: 3-36 Student eTool (CPM)

Click the link below to access the eTool:

[3-36 Student eTool \(CPM\)](#)

Use the Base Ten Block eTool to solve the problem.

Shade the 100's block by dragging a red block from the General Tools over the desired portion. You can also change the color or even add grid lines to your shading.



CC1 3.2.1: 3-90 Student eTool (CPM)

Click on the link below to access eTool.

[3-90 Student eTool \(CPM\)](#)

Using the colored arrows, record the frog's movements.

1. Click one of the green arrows and drag it to the desired location.

CPM Tiles

CC1 3-90 Student eTool

Directions: Drag arrows to the board.
Click and drag arrow to enlarge.
Double click to change direction.

The FROG is the green dot on the number line. Drag green lines with arrows to show the path of the frog hops. Tap and hold an arrow to change the length, color, and endings.

For each part below, the game starts with the frog sitting at the number 3 on the number line.

a. How many combinations of hops can you find to move Dr. Frog 15 feet from where he started? Show your work with pictures, words, numbers, or symbols.

b. Can the frog move 15 feet in three equal hops?

c. If two of the frog's hops are each 10 feet long, how could you describe the third hop so that he still lands 15 feet away from the starting pad? Is there more than one possibility?

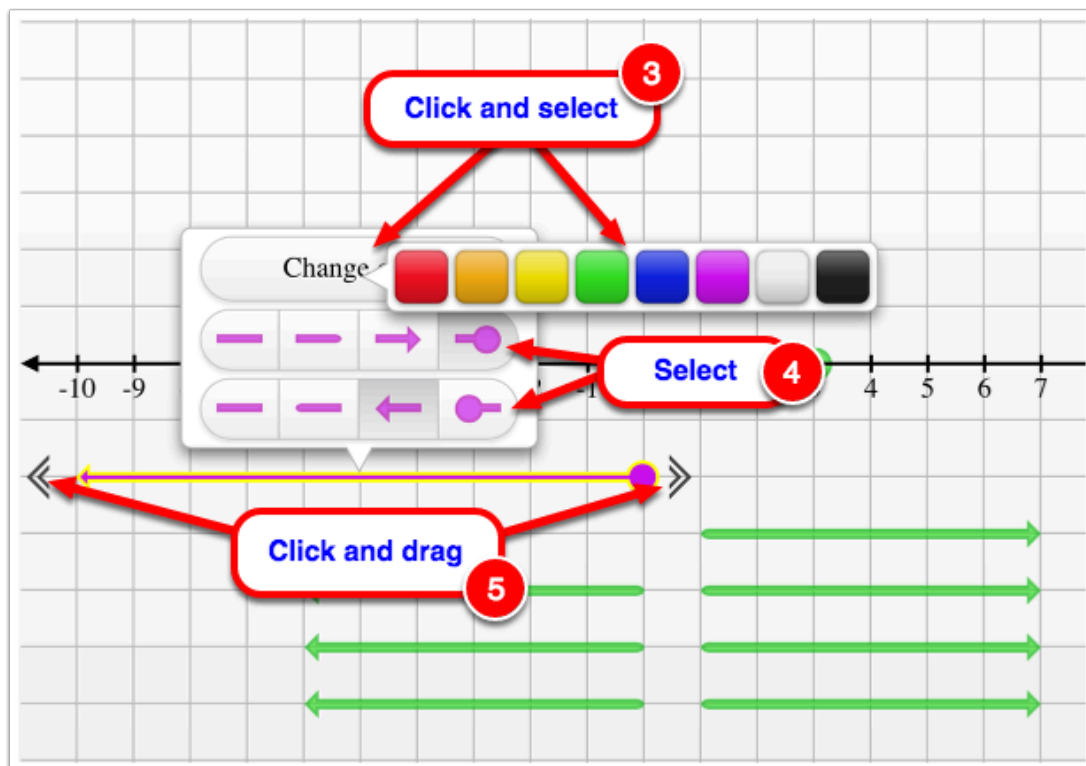
▼ Number Lines

Click and drag 1

2. Click one of the green arrows and hold to change the length, color and endings.

Click and hold 2

3. Click "Change Color" button and select the preferred color.
4. Select the endings for your arrow.
5. Click the double arrow image on each end of the arrow and drag horizontally to adjust the length.

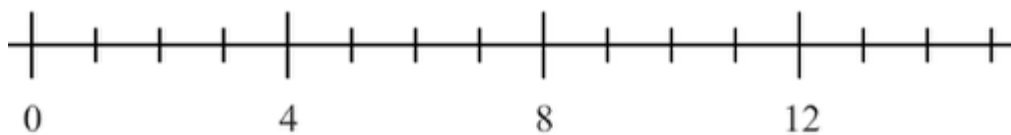


CC1 3.2.2: Frog Race Video

Click the link on below for the "Frog Race Video"

[Frog Race](#) 

1. What numbers will both frogs land on?

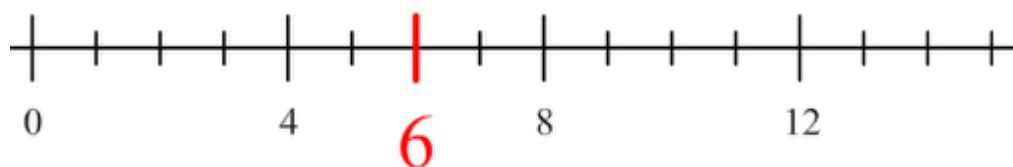


2. How can you know what will be the next number?



Frog Race

Which number will they
both land on next?



Copyright 2011 CPM Educational Program. All rights reserved.

CC1 3.2.2: 3-100 Student eTool (CPM)

Click the link on below for the "3-100 Student eTool (CPM)."

[3-100 Student eTool \(CPM\)](#)

1. Use the colored dots and arrows to help you keep track of your ideas.

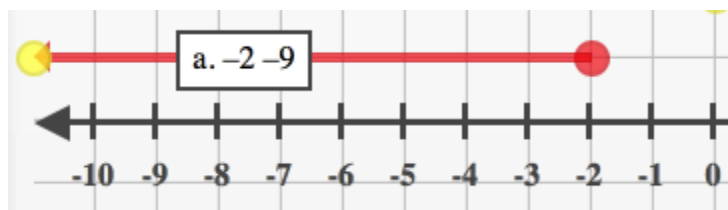
The screenshot shows the CPM Tiles interface. On the left is a sidebar with instructions and tool options. The main area displays five horizontal number lines, each with a problem label above it:

- a. $-2 - 9$: Number line from -12 to 6.
- b. $5 - 5$: Number line from -1 to 17.
- c. $-(-4) + 7$: Number line from -4 to 14.
- d. $-6 + 2$: Number line from -1 to 16.
- e. $-(-1) - 8$: Number line from -1 to 16.

CPM Tiles Sidebar:

- CC1 3-100 Student eTool
- Directions: Adjust the number line by click-hold until the line turns YELLOW. Then slide along the line for the desired range.
- Under General Tools drag dots and arrows onto the grid above the number line indicating the answer.
- To change the color of the dot, right click and select a new color.
- The colored line can also be used to help represent the hops on a number line.
- Solve each part of the problem.
- ▼ Number Lines
 - ← -1 0 1 → + -
- Area and Perimeter
- General Tools

2. Your work may look like the example below.



CC1 3.2.3: 3-111 Student eTool (CPM)

Click the link on below for the "3-111 Student eTool (CPM)."

[3-111 Student eTool \(CPM\)](#)

1. Use the colored dots and arrows to help you keep track of your ideas.

CPM Tiles

CC1 3-111 Student eTool

Directions: Adjust the number line by click-hold until the line turns YELLOW. Then slide along the line for the desired range.

Under General Tools drag dots and arrows onto the grid above the number line indicating the answer.

To change the color of the dot, right click and select a new color.

The colored line can also be used to help represent the hops on a number line.

Solve each part of the problem.

▼ Number Lines

← -1 0 1 → + -

► Area and Perimeter

► General Tools

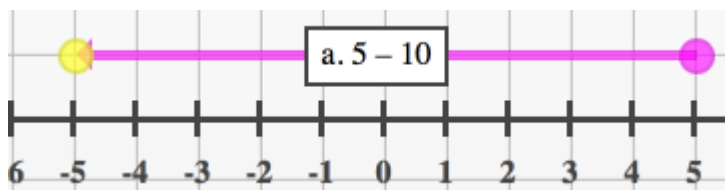
a. $5 - 10$

b. $-(-8) - 2$

c. $-5 + 5$

d. $-4 + 15$

2. Your work may look like the example below.

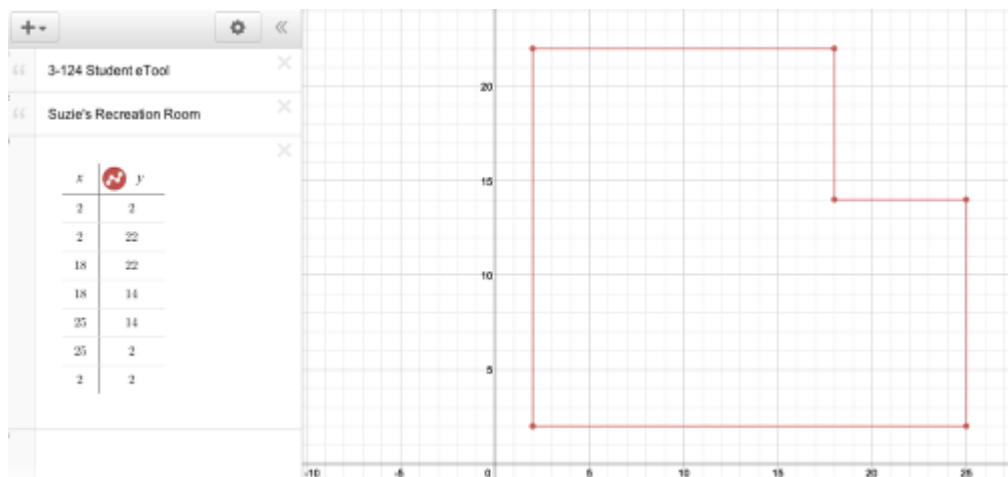


CC1 3.2.4: 3-124 Student eTool (Desmos)

Click the link on below for the "3-124 Student eTool (Desmos)"

[3-124 Student eTool \(Desmos\)](#)

1. Using the diagram, answer 3-124 a-c. You can save your work digitally or use the eTool to explore ideas writing your final version on graph paper.





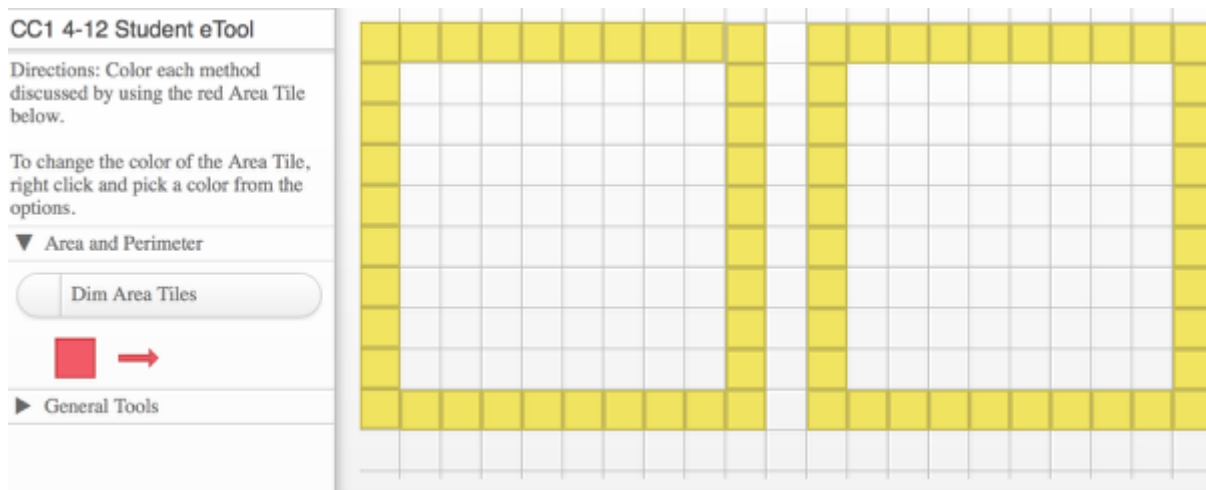
Chapter 4

CC1 4.1.2: 4-12 Student eTool (CPM)

Click the link on below for the "4-12 Student eTool (CPM)."

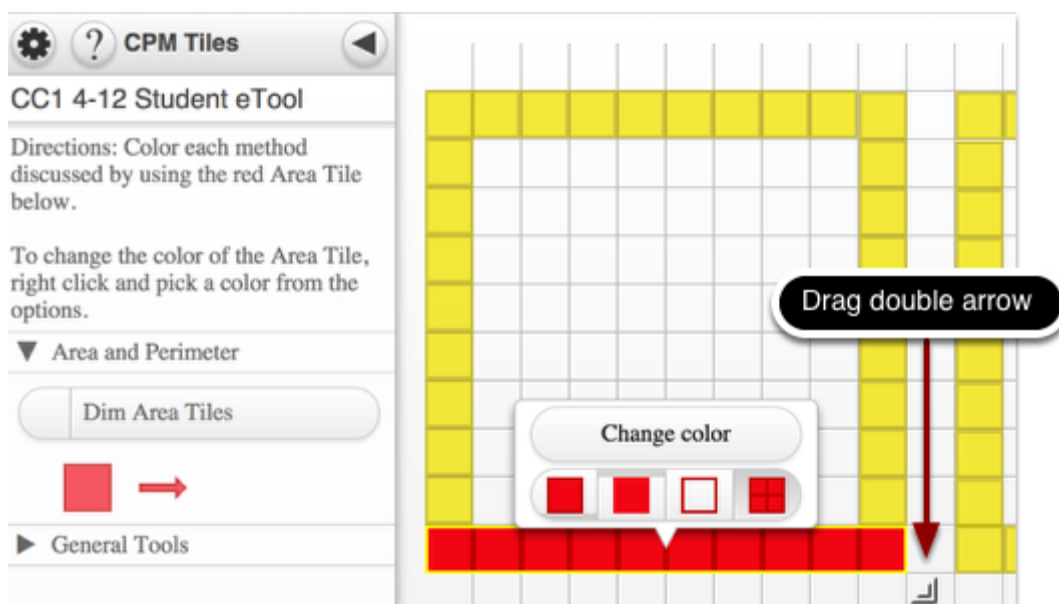
[4-12 Student eTool \(CPM\)](#)

1. Use the portion tiles and/or the arrows to show your ideas.



2. Area Tiles

- Drag RED tile from the tray to the display area.
- Drag the double arrow to enlarge in either direction.
- Change color.
- Drag to position.





Chapter 5

CC1 5.3.2: 5-76 Shape 1-8 Student eTools

Click on the line below for the 5-76 Shape Student eTool.

[5-76 Shape 1 Student eTool \(Desmos\)](#)

[5-76 Shape 2 Student eTool \(Desmos\)](#)

[5-76 Shape 3 Student eTool \(Desmos\)](#)

[5-76 Shape 4 Student eTool \(Desmos\)](#)

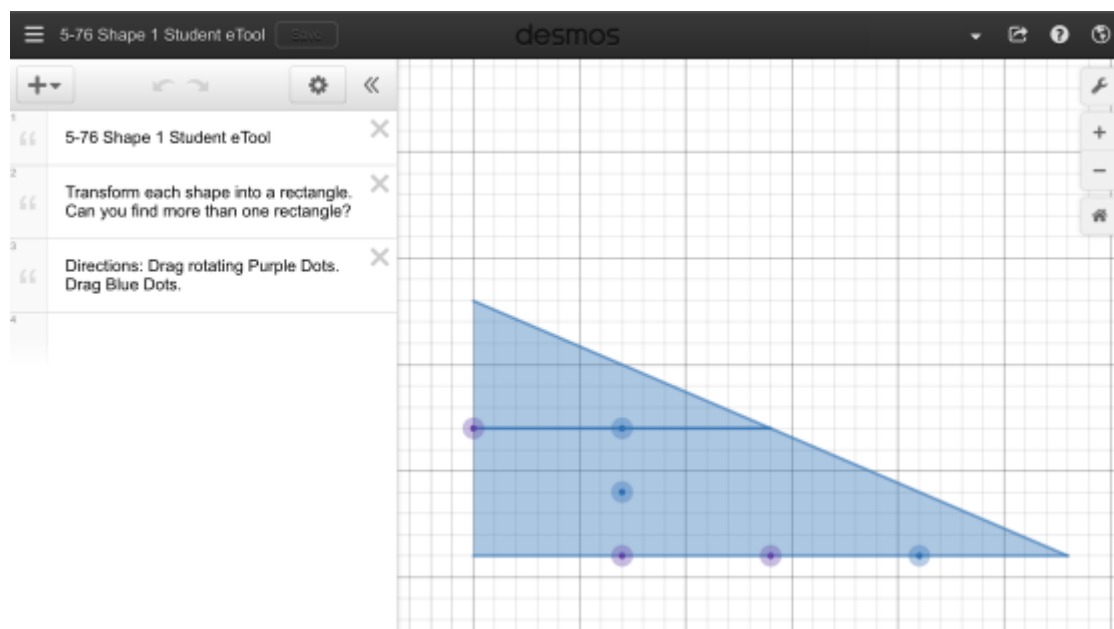
[5-76 Shape 5 Student eTool \(Desmos\)](#)

[5-76 Shape 6 Student eTool \(Desmos\)](#)

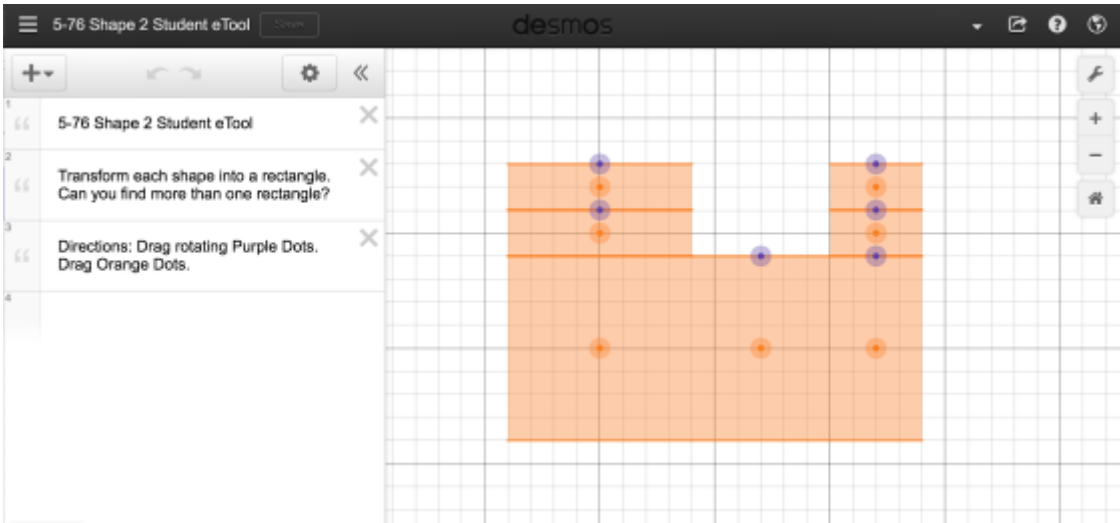
[5-76 Shape 7 Student eTool \(Desmos\)](#)

[5-76 Shape 8 Student eTool \(Desmos\)](#)

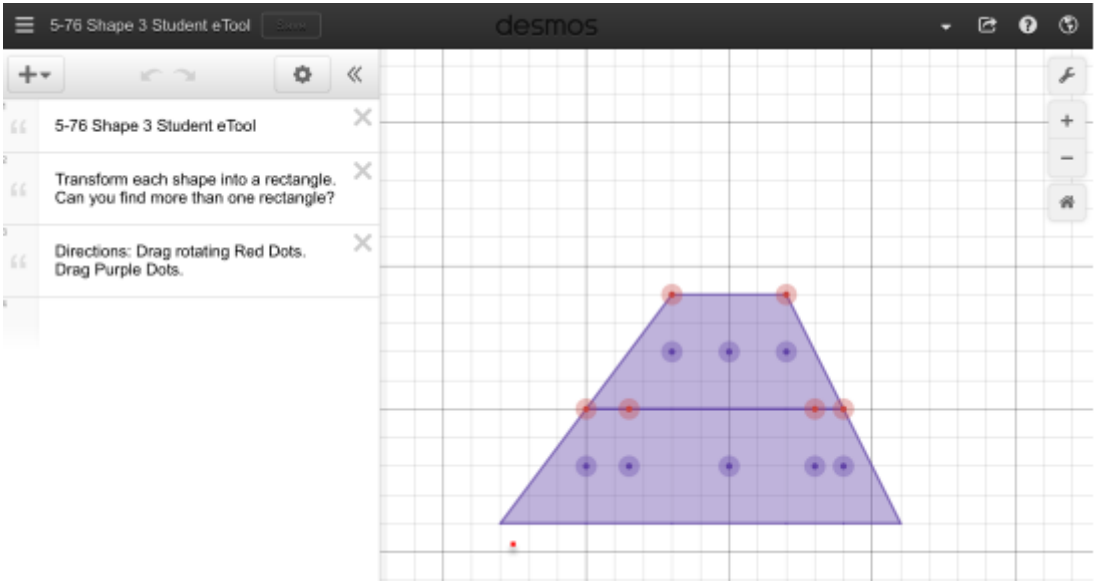
5-76 Shape 1 Student eTool



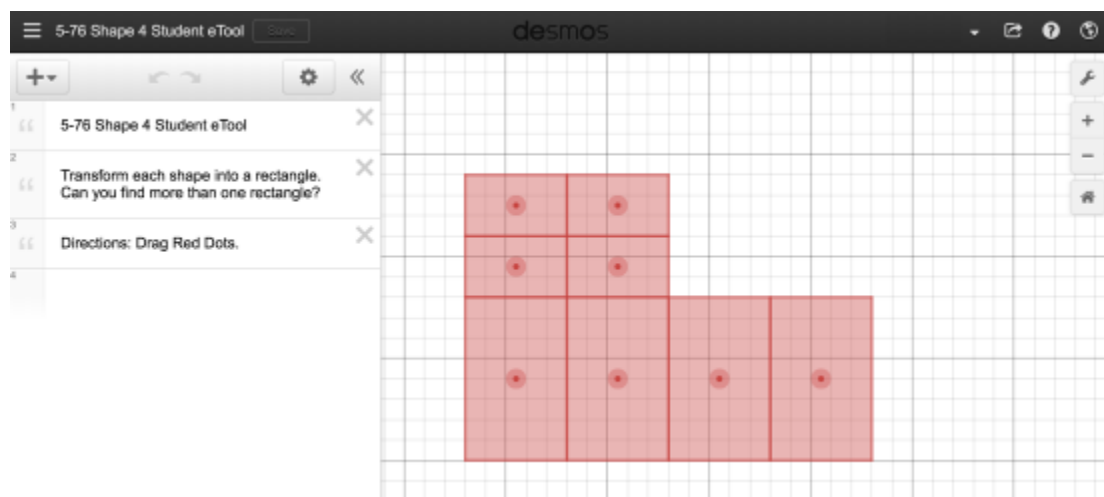
5-76 Shape 2 Student eTool



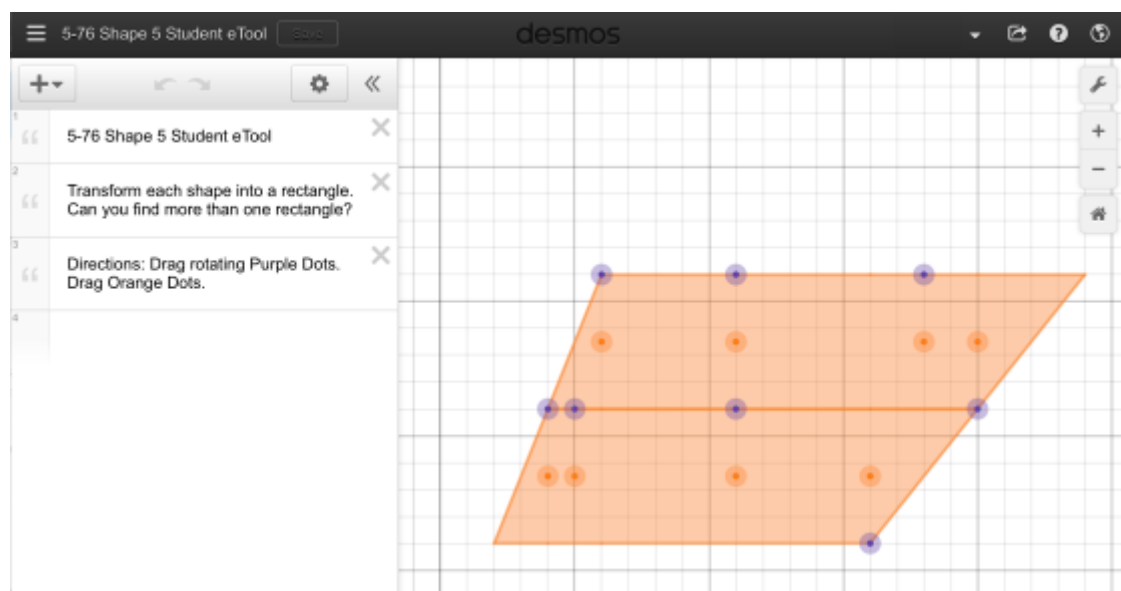
5-76 Shape 3 Student eTool



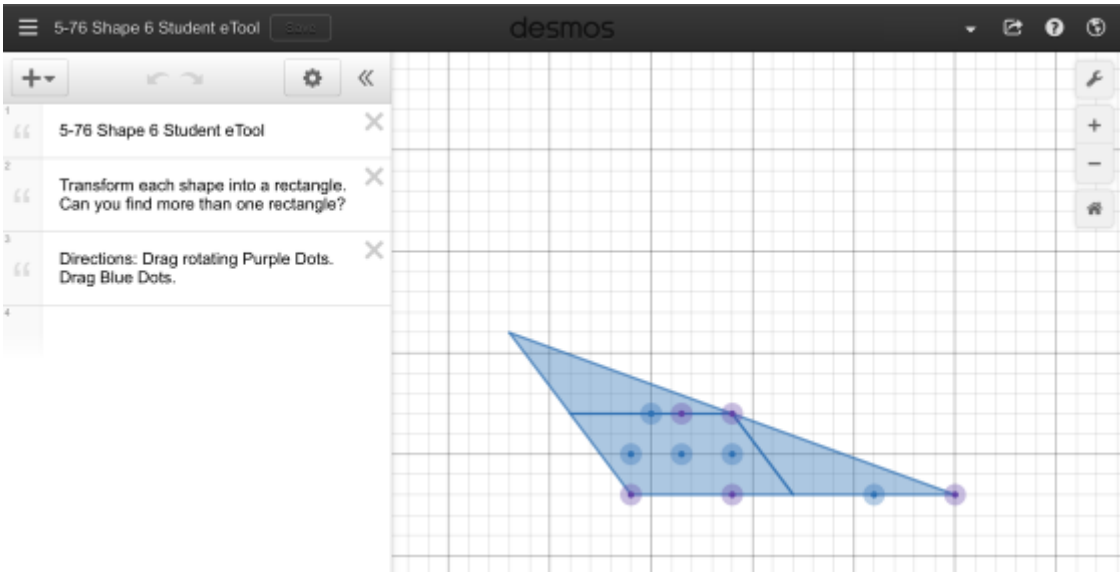
5-76 Shape 4 Student eTool



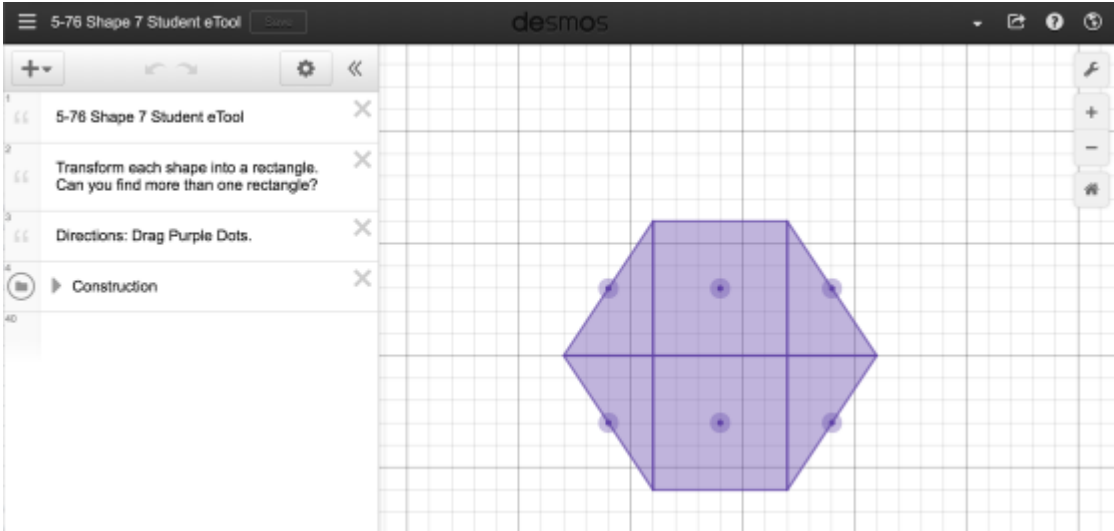
5-76 Shape 5 Student eTool



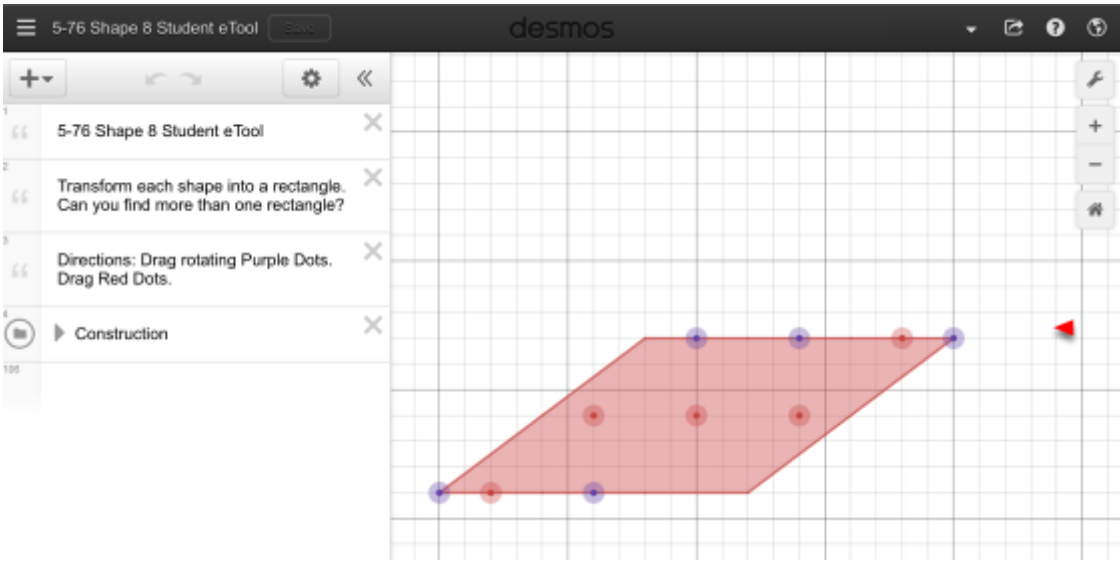
5-76 Shape 6 Student eTool



5-76 Shape 7 Student eTool



5-76 Shape 8 Student eTool



CC1 5.3.2: 5-78 Student eTool

Click on the line below for the CC1 5-78 Student eTool.

[CC1 5-78 Student eTool \(Desmos\)](#)

CC1 5-78 Student eTool (Desmos)

The screenshot shows the Desmos eTool interface for CC1 5-78. On the left, there is a list of instructions:

- CC1 5-78 Student eTool
- Blue Shape: Click and drag the blue points to rearrange the parts of the blue parallelogram into a rectangle.
- Orange Shape: Click and drag the orange points to rearrange the parts of the orange parallelogram into a rectangle.
- Purple Shape: Click and drag the purple points to rearrange the parts of the purple parallelogram into a rectangle. Where is the base? Where is the height?

On the right, there are three geometric shapes:

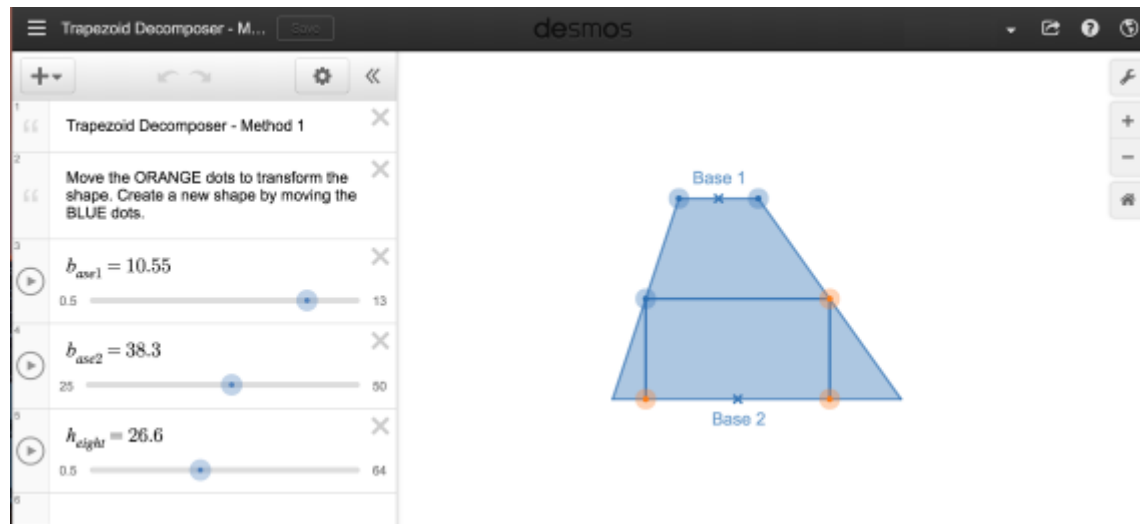
- A blue parallelogram with base b and height h .
- An orange parallelogram with base b and height h .
- A purple parallelogram with base b and height h .

CC1 5.3.4: 5-96 Trapezoid Decomposer - Method 1 Student eTool (Desmos)

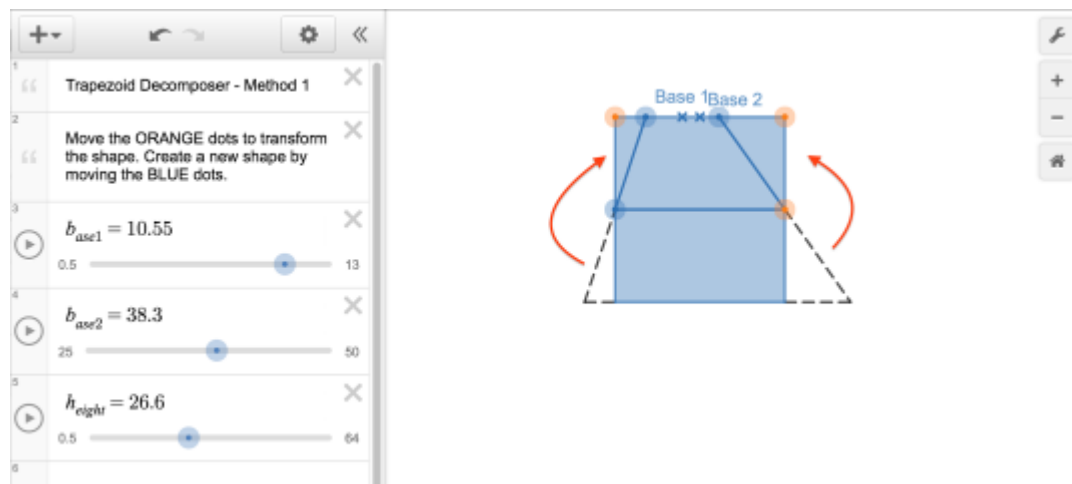
Click on the line below for the 5-96 Trapezoid Decomposer - Method 1 Student eTool (Desmos).

[5-96 Trapezoid Decomposer - Method 1 Student eTool \(Desmos\)](#)

5-96 Trapezoid Decomposer - Method 1 Student eTool (Desmos)



Bottom half of each of the side triangles are rotated up to form a rectangle.



Top half where the parallel sides are at the top and bottom is rotated downward to form a parallelogram.

+
↶ ↷
⚙
⏪

Trapezoid Decomposer - Method 1

Move the ORANGE dots to transform the shape. Create a new shape by moving the BLUE dots.

$b_{\text{top}} = 8.3$
×

0.5

▶

▶

•

13

$b_{\text{bot}} = 38.3$
×

25

▶

▶

•

50

$h_{\text{height}} = 26.6$
×

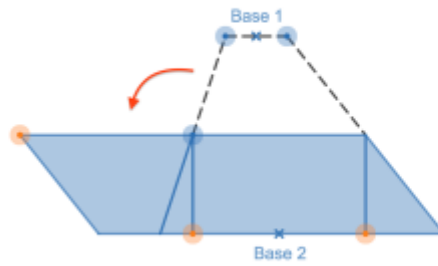
0.5

▶

▶

•

64

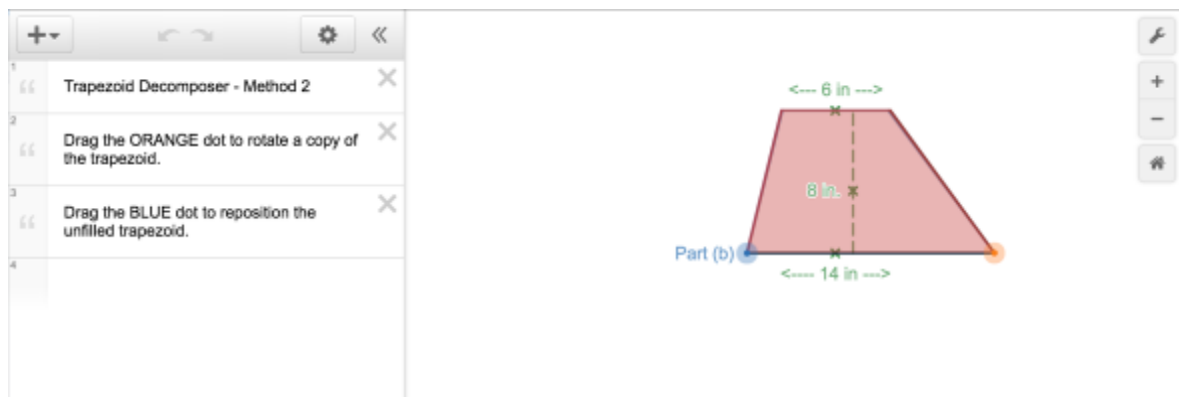


CC1 5.3.4: 5-96 Trapezoid Decomposer - Method 2 Student eTool (Desmos)

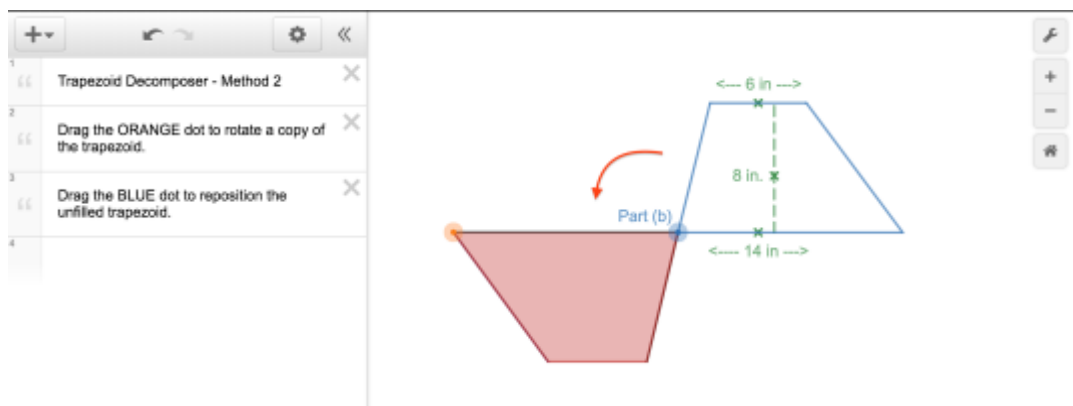
Click on the line below for the 5-96 Trapezoid Decomposer - Method 2 Student eTool (Desmos).

[5-96 Trapezoid Decomposer - Method 2 Student eTool \(Desmos\)](#)

5-96 Trapezoid Decomposer - Method 2 Student eTool (Desmos)



Rotate the ORANGE dot to create a rotated duplicate of the trapezoid.



Then move the blue dot to translate the blue outlined trapezoid to fit next to the shaded trapezoid. Now you have doubled the area in creating a parallelogram.

+

⌂

⚙

⏪

1

Trapezoid Decomposer - Method 2

×

2

⏮

Drag the ORANGE dot to rotate a copy of the trapezoid.

×

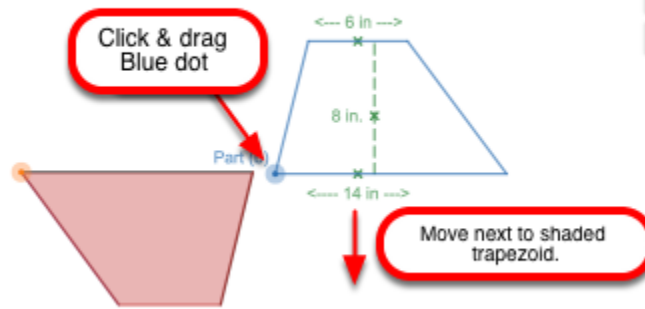
3

⏮

Drag the BLUE dot to reposition the unfilled trapezoid.

×

4



+

⌂

⚙

⏪

1

Trapezoid Decomposer - Method 2

×

2

⏮

Drag the ORANGE dot to rotate a copy of the trapezoid.

×

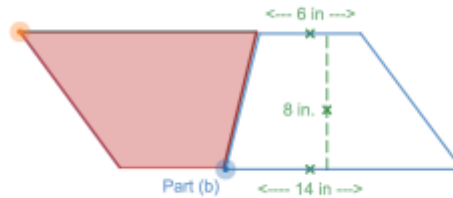
3

⏮

Drag the BLUE dot to reposition the unfilled trapezoid.

×

4





Chapter 6

CC1 6.2.2: 6-82 & 6-83 Student eTools (CPM)

Click the link on below for the 6-82 Student eTool (CPM).

[6-82 Student eTool \(CPM\)](#)

[6-83a Student eTool \(CPM\)](#)

[6-83b Student eTool \(CPM\)](#)

[6-83c Student eTool \(CPM\)](#)

1. 6-82 Student eTool (CPM):

The screenshot shows the CPM Tiles eTool interface. On the left is a sidebar with instructions and tile selection options. The main area on the right displays a collection of algebra tiles arranged to represent a polynomial expression.

Instructions:

- Use the tiles shown at right to help solve the problem.
- Use mathematical symbols (numbers, variables, and operations) to record the area of this collection of tiles.
- Write at least three different algebraic expressions that represent the area of this tile collection.

Tile Selection:

- Backgrounds:** (None selected)
- Algebra Tiles:**
 - Label: x** : Shows a vertical blue tile labeled x and a square blue tile labeled x^2 .
 - Label: y** : Shows a vertical purple tile labeled y and a square purple tile labeled y^2 .
 - Label: 1** : Shows a small blue square tile labeled 1 and a green rectangle labeled $x \cdot y$.

Tile Collection:

The main area contains the following tiles:

- Two large blue squares labeled x^2 .
- Two vertical blue rectangles labeled x .
- Two horizontal blue rectangles labeled x .
- Four small blue squares labeled 1 .

2. 6-83a Student eTool (CPM):

CC1 6-83a Student eTool

Use the tiles shown at right to solve the problem.

- Use mathematical symbols (numbers, variables, and operations) to record the area of this collection of tiles.
- Write at least three different algebraic expressions that represent the area of this tile collection.

► Backgrounds

▼ Algebra Tiles

Label: x

x x^2

Label: y

y y^2

1 $x \cdot y$

3. 6-83b Student eTool (CPM):

CC1 6-83b Student eTool

Use the tiles shown at right to solve the problem.

- Use mathematical symbols (numbers, variables, and operations) to record the area of this collection of tiles.
- Write at least three different algebraic expressions that represent the area of this tile collection.

► Backgrounds

▼ Algebra Tiles

Label: x

x x^2

Label: y

y y^2

1 $x \cdot y$

4. 6-83c Student eTool (CPM):

CPM Tiles

CC1 6-83c Student eTool

Use the tiles shown at right to solve the problem.

- Use mathematical symbols (numbers, variables, and operations) to record the area of this collection of tiles.
- Write at least three different algebraic expressions that represent the area of this tile collection.

Backgrounds

Algebra Tiles

Label: x

x

x^2

Label: y

y

y^2

1

$x \cdot y$

CC1 6.2.2 6-84 Student eTool (CPM)

Click the link on below for the 6-84 Student eTool (CPM).

[6-84 Student eTool \(CPM\)](#)

6-84 Student eTool (CPM)

The screenshot shows the "CPM Tiles" eTool interface. The title bar reads "CPM Tiles". Below it, the window title is "CC1 6-84 Student eTool". The main content area contains the following text:

6-84. Build each collection described below with algebra tiles and use the tiles to answer the questions.

a. If a person combined a collection of three x^2 -tiles, two x -tiles and five unit tiles with one x^2 -tile and two x -tiles, how many of each tile would they have?

b. If a student started with three x^2 -tiles, two x -tiles and five unit tiles and removed two x^2 -tiles, two x -tiles and three unit tiles, what would remain?

Below the text is a section titled "Algebra Tiles" with a dropdown arrow. It contains three rows of tiles, each with a label and a slider:

- Label: x . The row contains a blue x -tile and a blue x^2 -tile.
- Label: y . The row contains a purple y -tile and a purple y^2 -tile.
- Label: 1 . The row contains a green 1 -tile and a green $x \cdot y$ -tile.

The right side of the interface is a large, empty workspace for building the collections.

CC1 6.2.3: 6-94 Student eTool (CPM)

Click the link on below for the 6-94 Student eTool (CPM).

[6-94 Student eTool \(CPM\)](#)

1. 6-94:

CPM Tiles

CC1 6-94 Student eTool

6-94. With your team, find and record the total perimeter and area of each shape. If possible, write the perimeter in more than one way.

Moving labels along the edges may help keep track of your work.

a.

b.

c.

Move the labels below to the side edges of each figure.

x	x	x	x	x	x
x	x	x	x	x	x
1	1	1	1	1	1
1	1	1	1	1	1
1	1	1	1	1	1



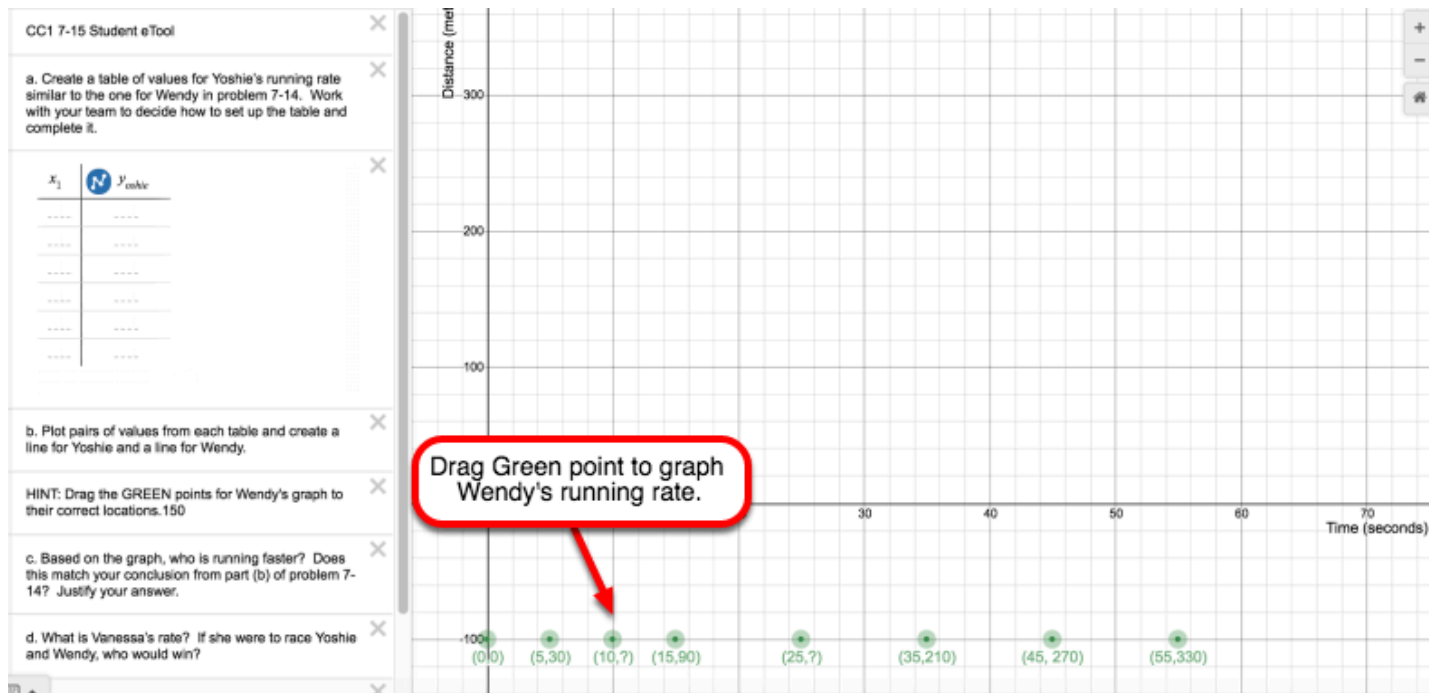
Chapter 7

CC1 7.1.2 7-15 Student eTool (Desmos)

Click on the line below for the 7-15 Student eTool (Desmos).

[7-15 Student eTool \(Desmos\)](#)

7-15 Student eTool (Desmos)

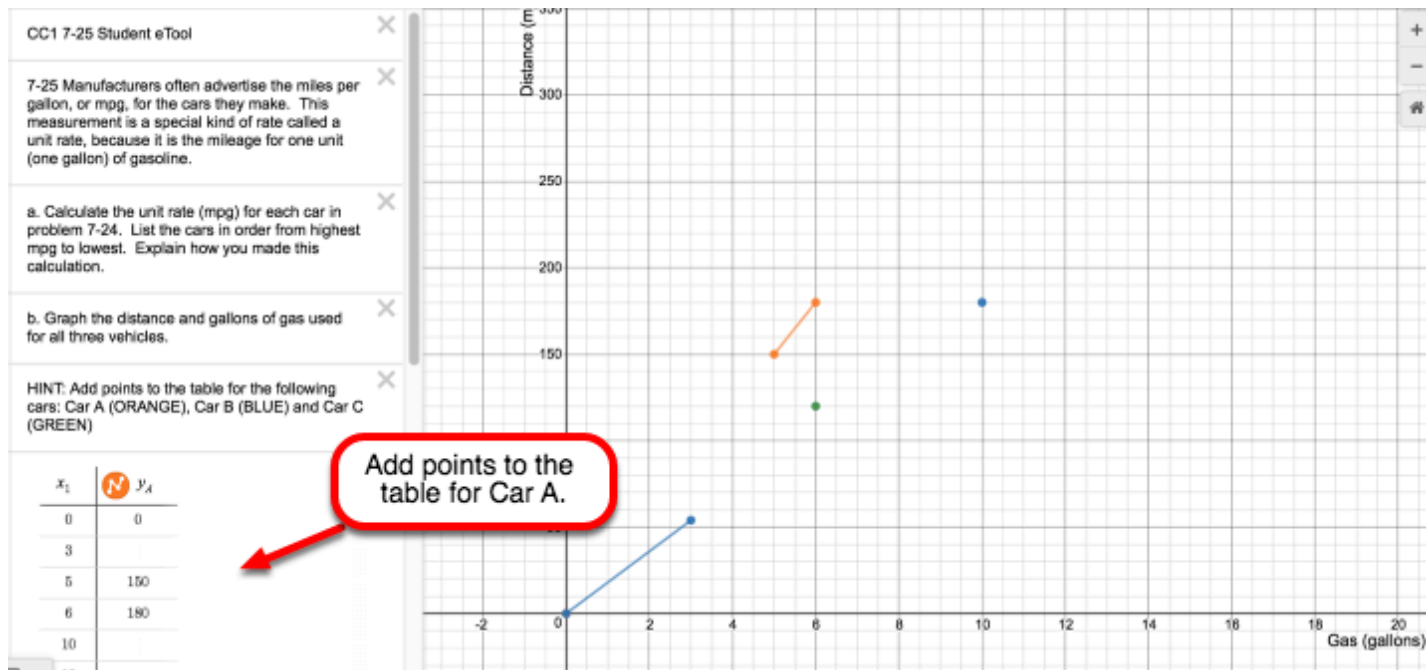


CC1 7.1.3 7-25 Student eTool (Desmos)

Click the link below for the "7-25 Student eTool (Desmos)."

[7-25 Student eTool \(Desmos\)](#)

7-25 Student eTool (Desmos)





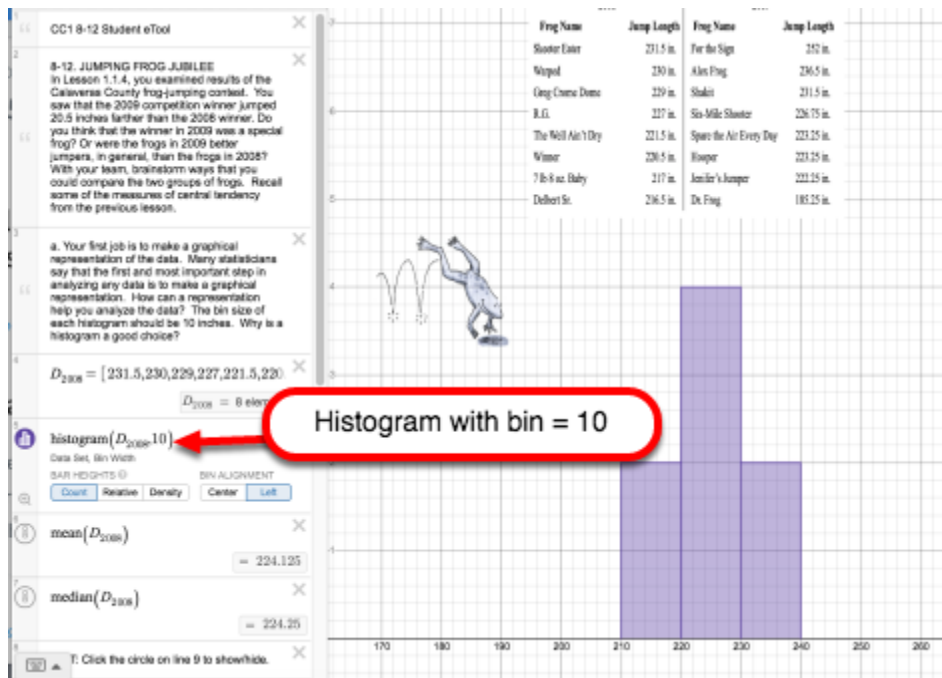
Chapter 8

CC1 8.1.2: 8-12 Student eTool (Desmos)

Click the link on below to access eTool .

[8-12 Student eTool \(Desmos\)](#)

This eTool creates a histogram of the Jumping Frog Jubilee data. The bin size is 10.



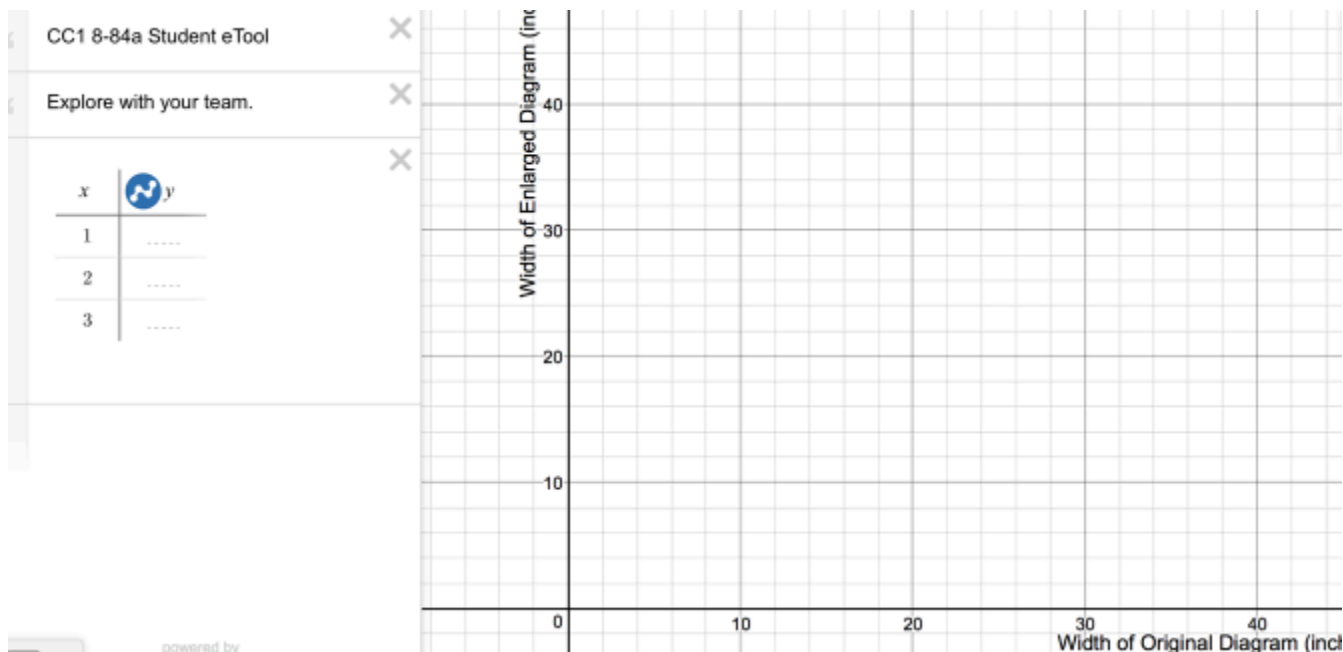
CC1 8.3.1: 8-84 and 8-86 Student eTools (Desmos)

Click the links below for the "8-84 and 8-86 Student eTools (Desmos)."

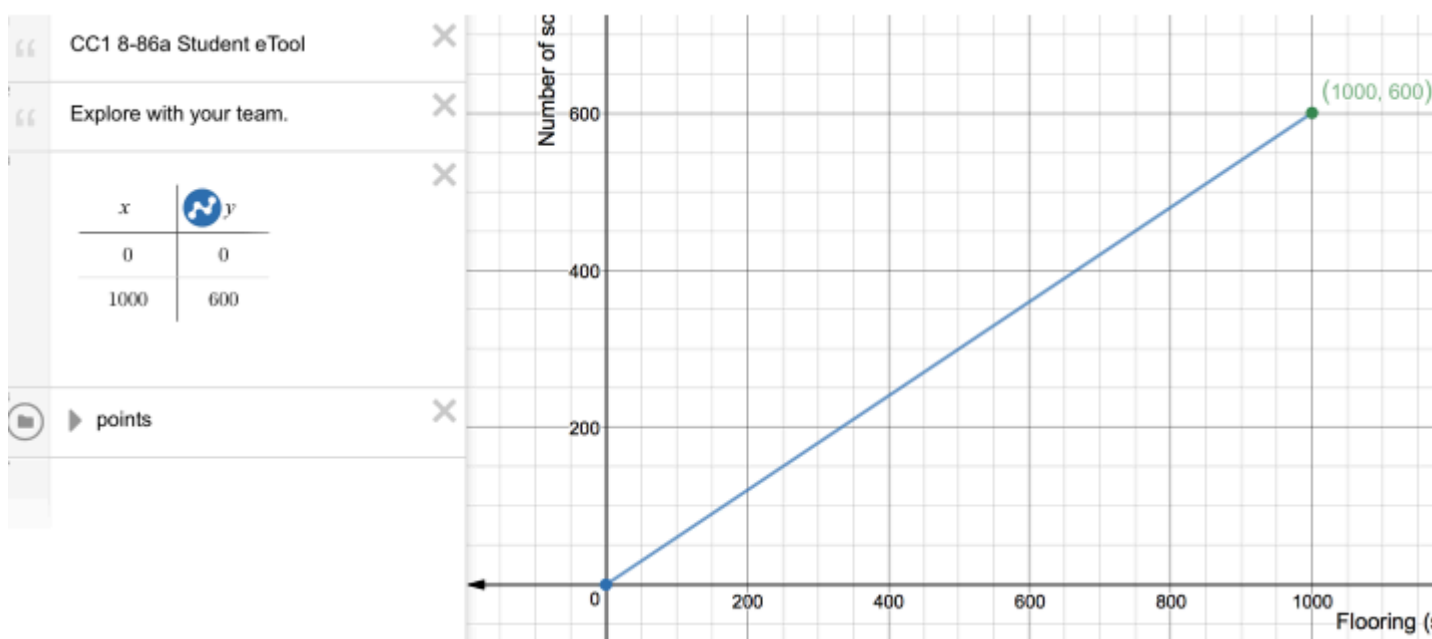
[8-84 Student eTool \(Desmos\)](#)

[8-86 Student eTool \(Desmos\)](#)

1. 8-84a



2. 8-86a





Chapter 9

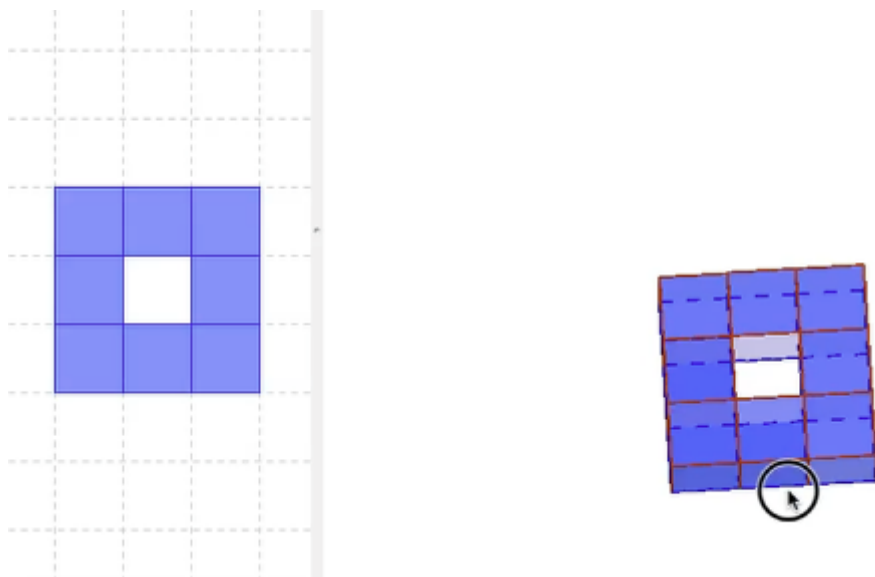
CC1 9.1.1: 9-1 3D Video

The video shows the object in 3-D space.

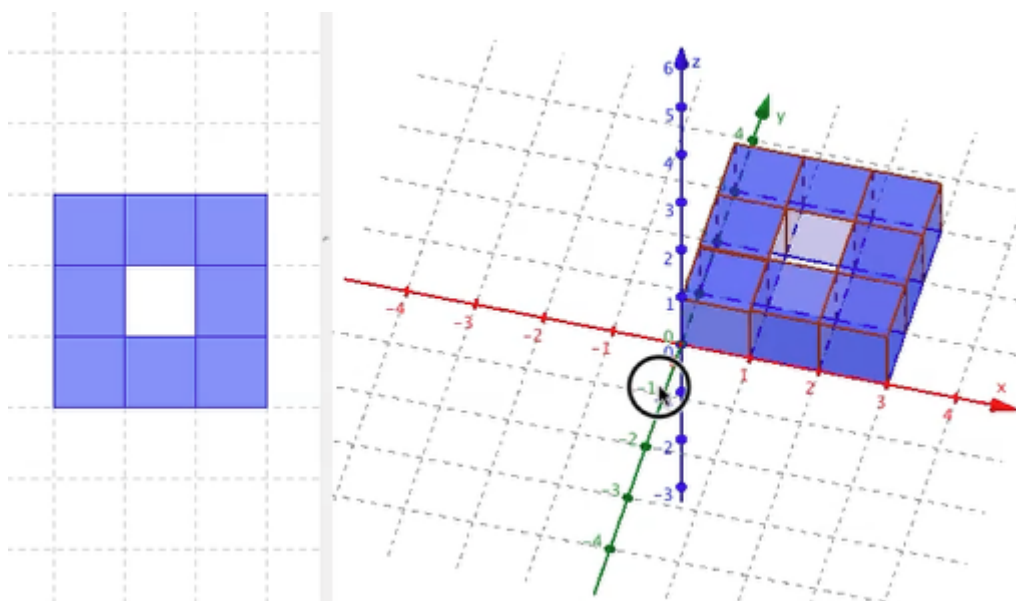
Click the link on below for the "9-1 3D Video"

[9-1 Video](#) 

1. Screen shot:



2. Screen shot:





CC1 9.1.1: Cube Cutting Video

Click the link on below for the "Cube Cutting Video"

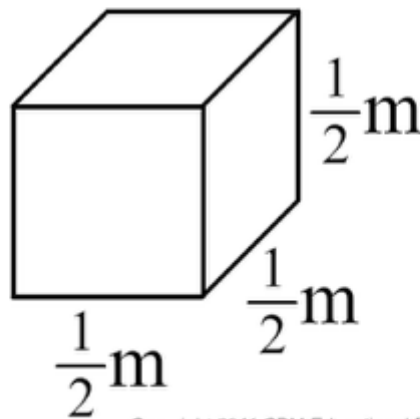
[Cube Cutting Video](#) 

1. Screen Shot:



Cube Cutting Demo

How many $(\frac{1}{2}\text{m})^3 \dots$

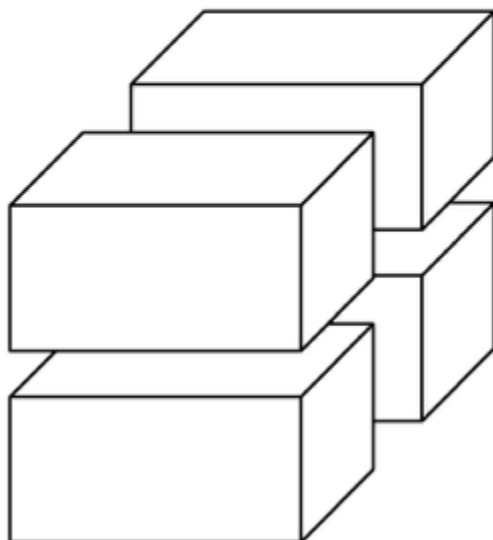


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2. Screen Shot:



Cube Cutting Demo

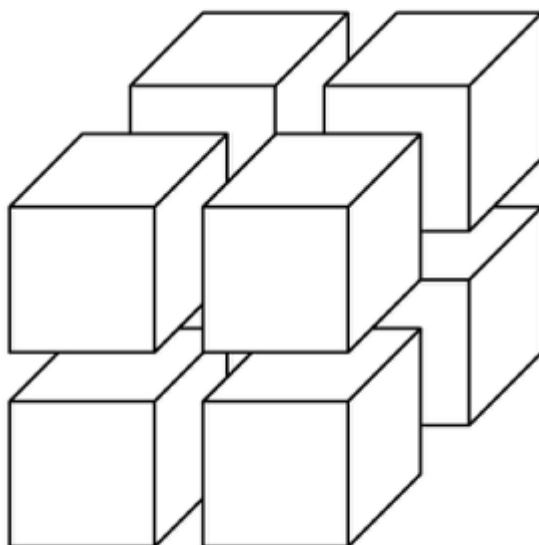


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3. Screen Shot:



Cube Cutting Demo



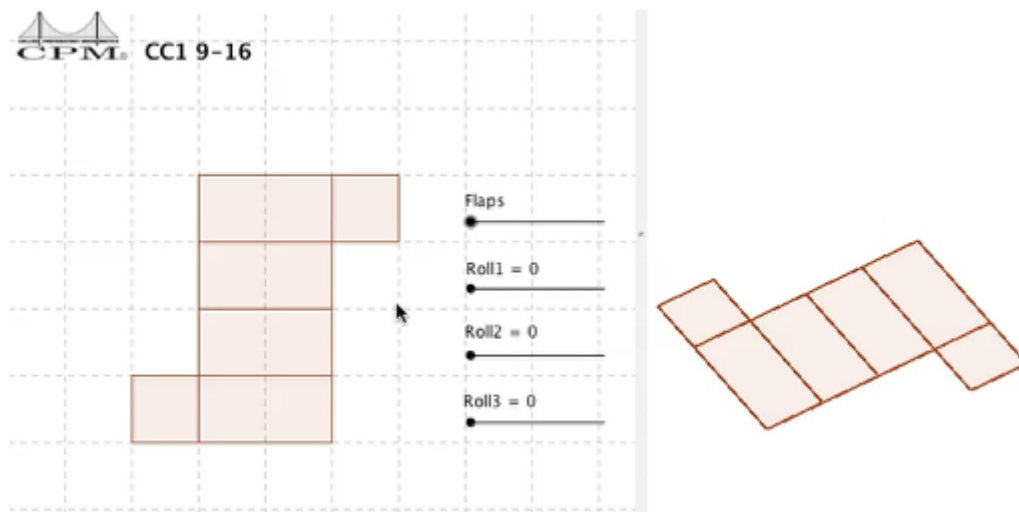
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CC1 9.1.2: Net Demo Video

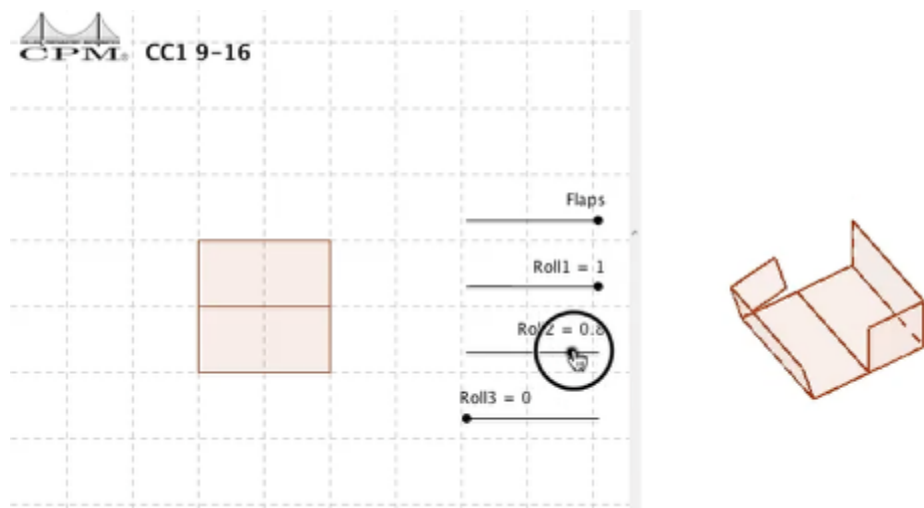
Click the link on below for the "Net Demo Video"

[Net Demo](#) 

1. Screen Shot:



2. Screen Shot:



3. Screen Shot:

