



Name _____

5th Grade Math Remote Learning Packet

Week 36



Dear Educator,

My signature is proof that I have reviewed my scholar's work and supported him to the best of my ability to complete all assignments.

(Parent Signature)

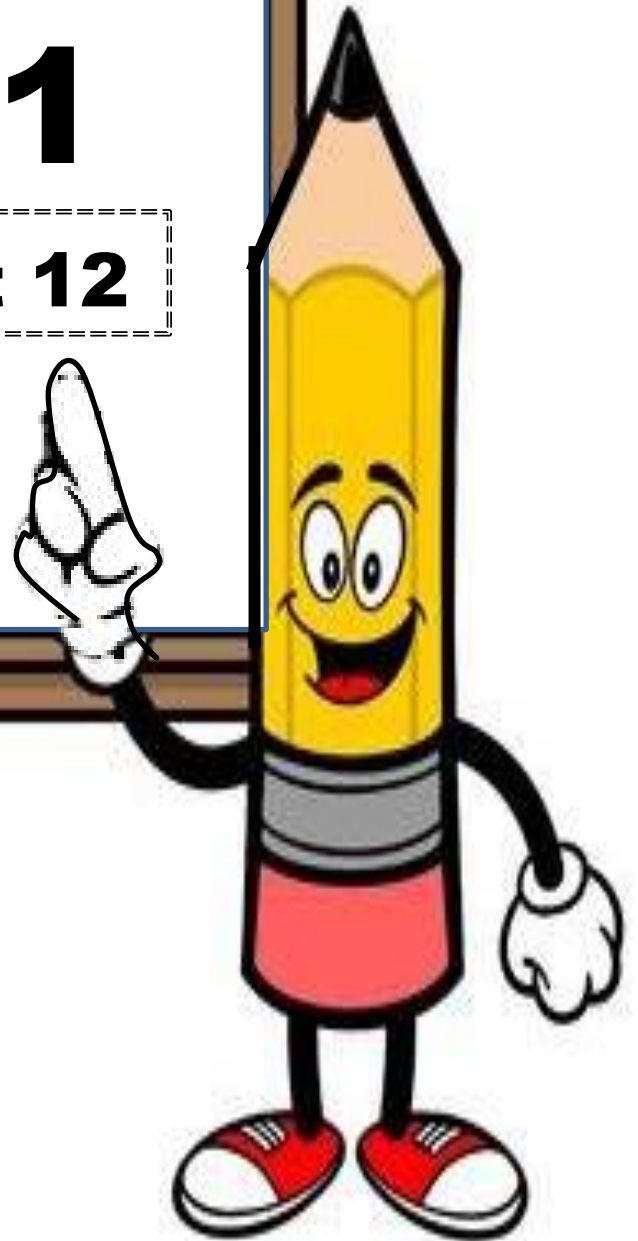
(Date)

Parents please note that all academic packets are also available on our website at www.brighterchoice.org under the heading "Remote Learning." All academic packet assignments are mandatory and must be completed by all scholars.



Day # 1

Mod 6 Packet 12



Name: _____ Week 36 Day 1 Date: _____

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Do Now

Complete the tables for the given rules.

Line ℓ

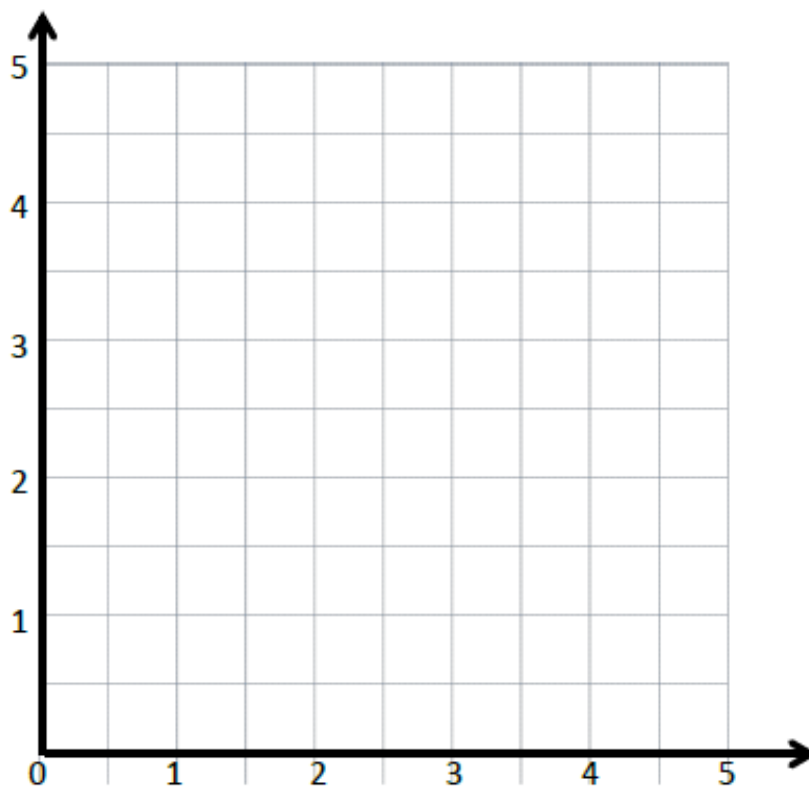
Rule: *Halve x , and then add 1*

x	y	(x, y)
0		
1		
2		
3		

Line m

Rule: *Halve x , and then add . 2*

x	y	(x, y)
0		
1		
2		
3		



- a. Draw each line on the coordinate plane above.
- b. Compare and contrast these lines.

Input Activity:

Problem 1:

Line l

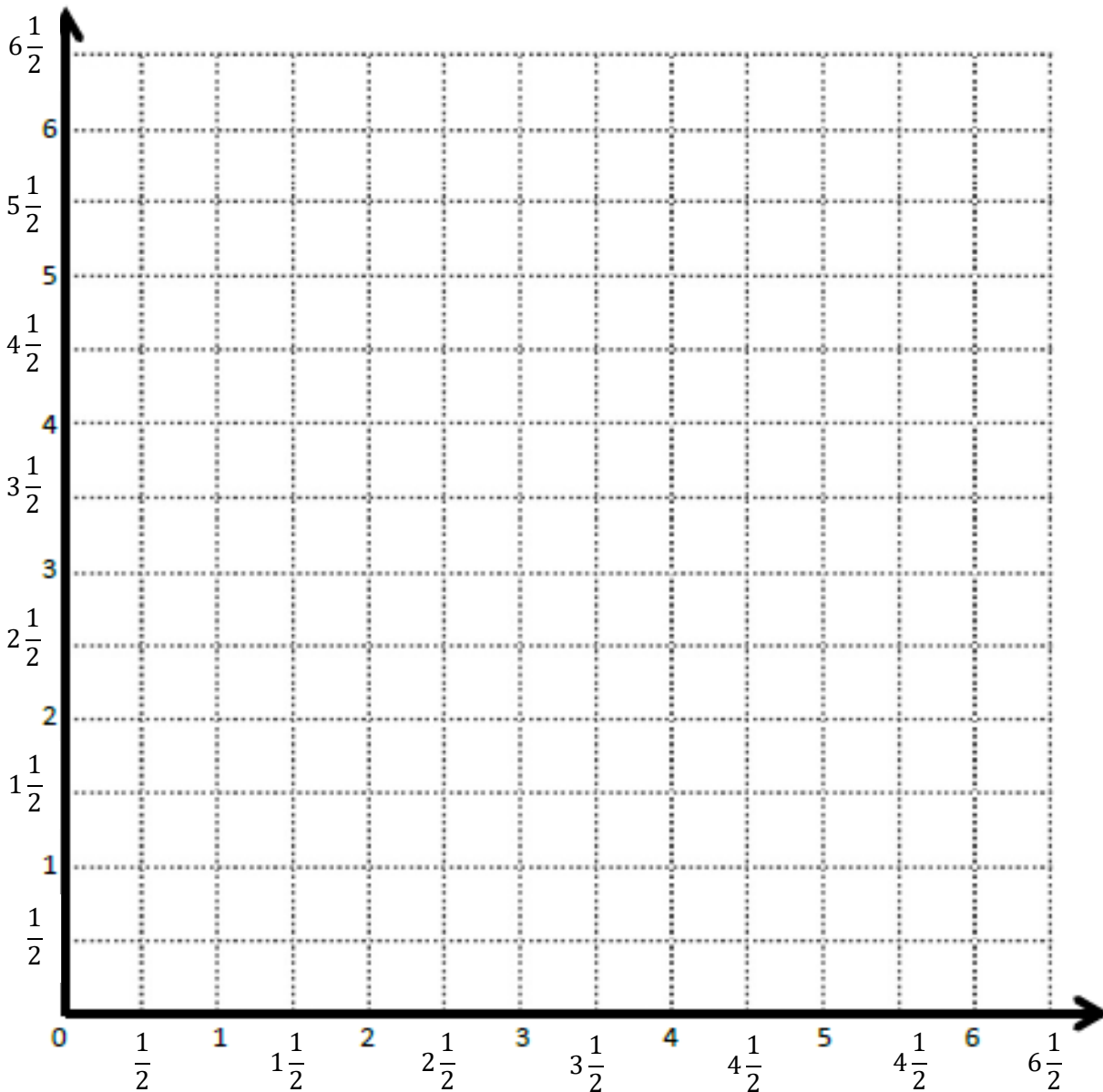
Line m

Rule: _____

Rule: _____

Point	x	y	(x, y)
A	$1\frac{1}{2}$	3	$(1\frac{1}{2}, 3)$
B			
C			
D			

Point	x	y	(x, y)
A			
E			
F			
G			



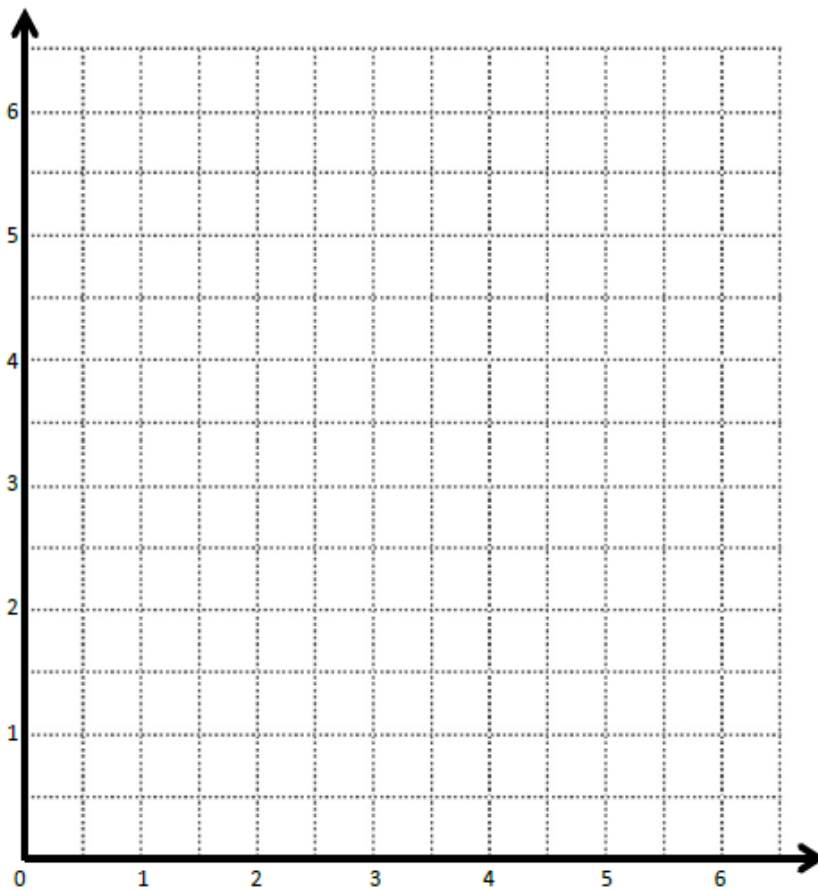
Problem 2:

Create a mixed operation rule for the line that contains the points $(0, 1)$ and $(1, 3)$.

- a. Identify 2 more points, O and P , on this line. Draw the line on the grid.

Point	x	y	(x, y)
O			
P			

- b. Write a rule for a line that is parallel to \overrightarrow{OP} and goes through point $(1, 2\frac{1}{2})$.



Problem 3:

Write a rule for the line that contains the points $(0, 0)$ and $(2, 2)$

- a. Identify 2 more points on this line. Draw the line on the grid below.

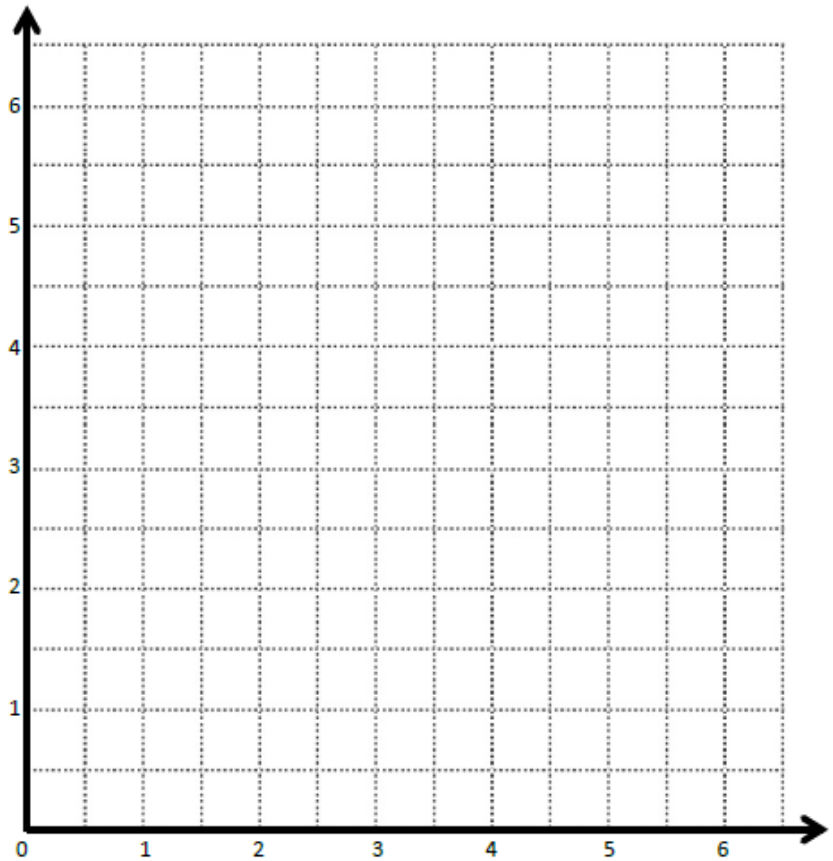
Point	x	y	(x, y)
B			
C			

- b. Write a rule for a line that is parallel to \overrightarrow{BC} and goes through point $(1, \frac{1}{2})$

Create a rule for the line that contains the points $(1, 1\frac{1}{2})$ and $(2, 2\frac{1}{2})$

- a. Identify 2 more points on this line. Draw the line on the grid on the right.

Point	x	y	(x, y)
G			
H			



- b. Write a rule for a line that passes through the origin and lies between \overrightarrow{BC} and \overrightarrow{GH} .

Problem Set:

Give the rule for a line that contains the point $\frac{1}{2}, 1\frac{1}{2}$ using the operation or description below. Then, name 2 other points that would fall on each line.

a. Addition: _____

Point	x	y	(x, y)
T			
U			

b. A line parallel to the x -axis: _____

Point	x	y	(x, y)
G			
H			

c. Multiplication: _____

Point	x	y	(x, y)
A			
B			

d. A line parallel to the y -axis: _____

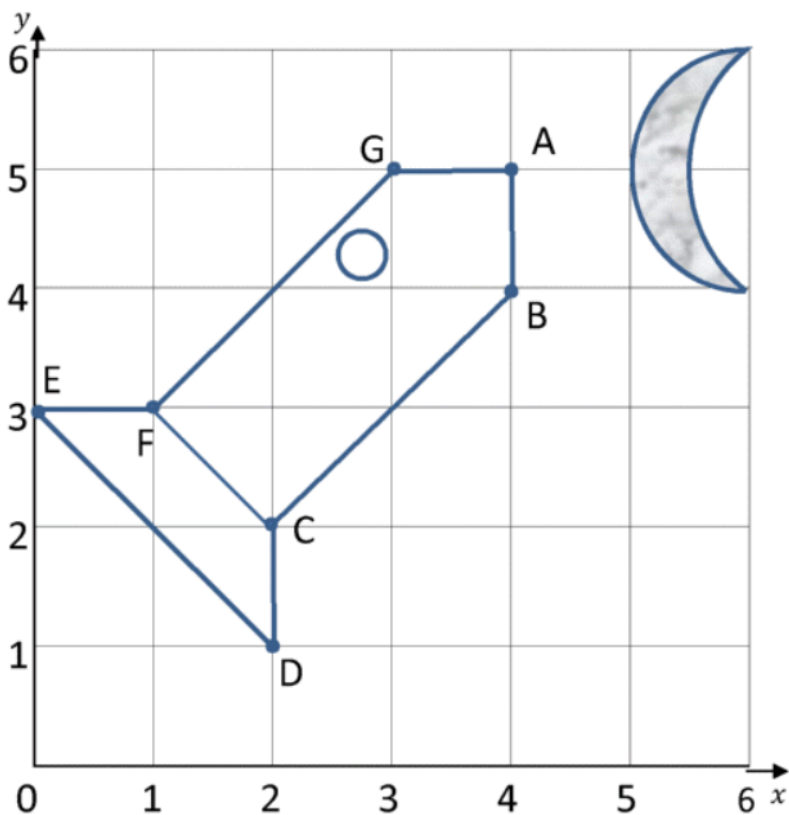
Point	x	y	(x, y)
V			
W			

e. Multiplication with addition: _____

Point	x	y	(x, y)
R			
S			

Application Problem:

Andrew drew the following rocket on the grid below. He handed the grid to you, his partner, to write the coordinates for each point of Andrew's rocket. Using the rocket grid, write down the coordinates of each point.



1) Write down the coordinates of this rocket.

A (__, __)

B (__, __)

C (__, __)

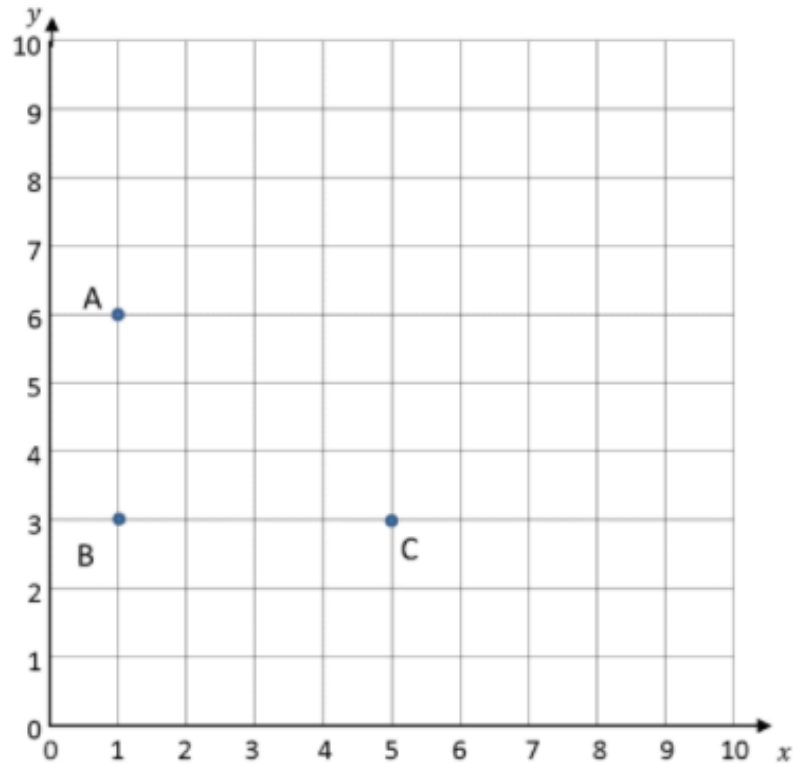
D (__, __)

E (__, __)

F (__, __)

G (__, __)

Exit Ticket:



1) What are the coordinates of points A, B and C?

A (__, __) B (__, __) C (__, __)

2) Plot point D so that the four points make a rectangle.

3) What are the coordinates of point D? (__, __)

4) On the same coordinate grid, plot these coordinates:

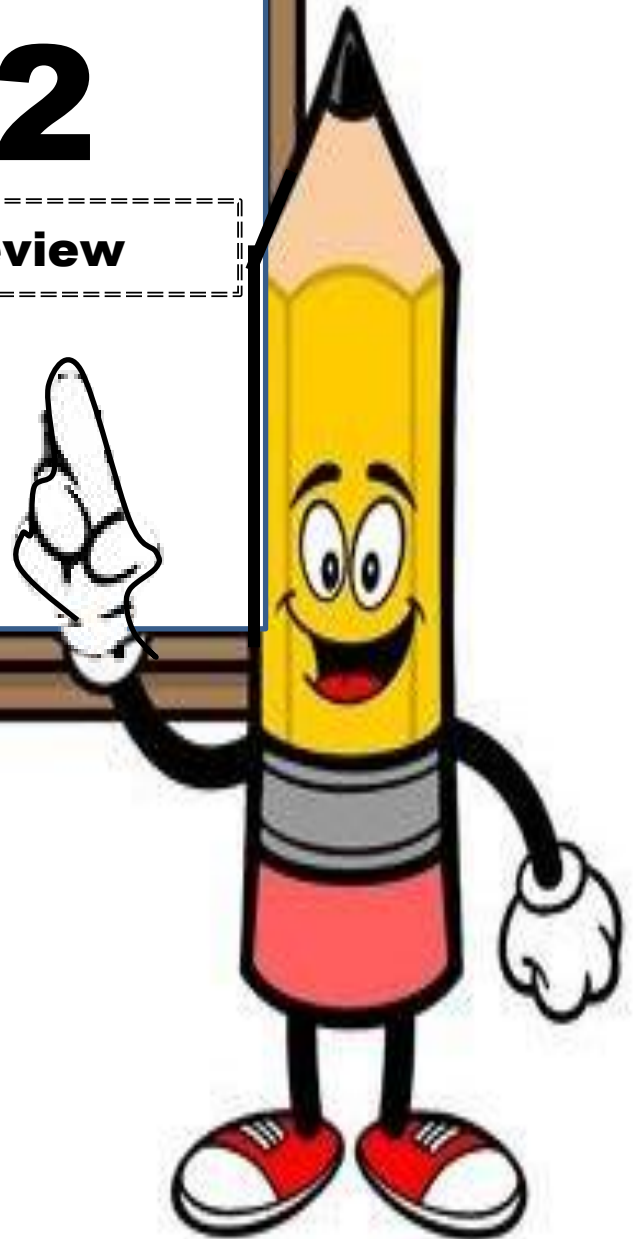
E (7,6) F (7,8) G (9,8) H (9,6)

5) Join the coordinates together. What shape do they make? _____



Day # 2

Mod 6 Mid-Mod SPA Review



Name: _____ Week 36 Day 2 Date: _____

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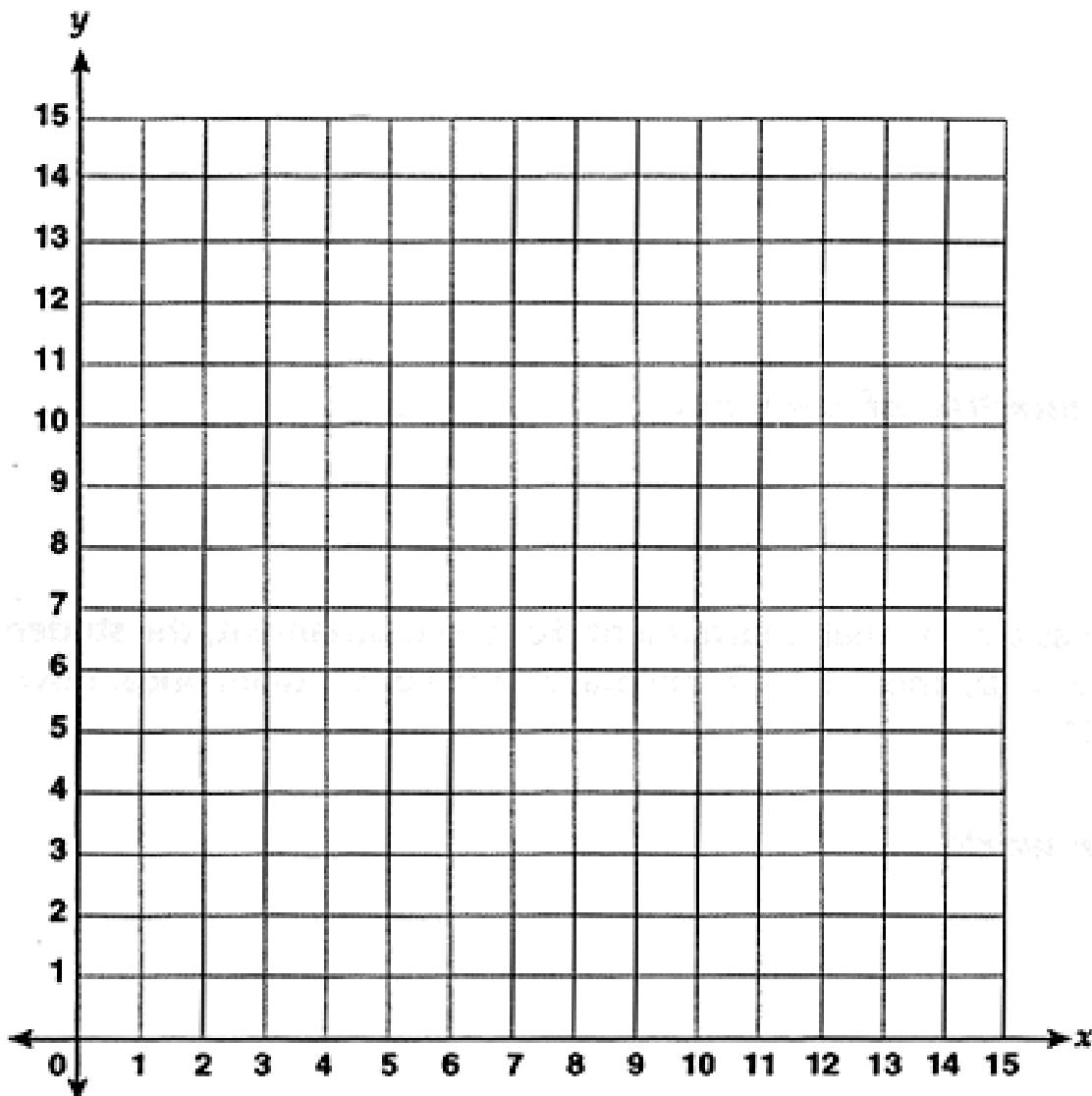
Do Now

Line g Rule: y is x tripled

x	y	(x, y)
1		
2		
5		
7		

Line h Rule: y is x divided by 3

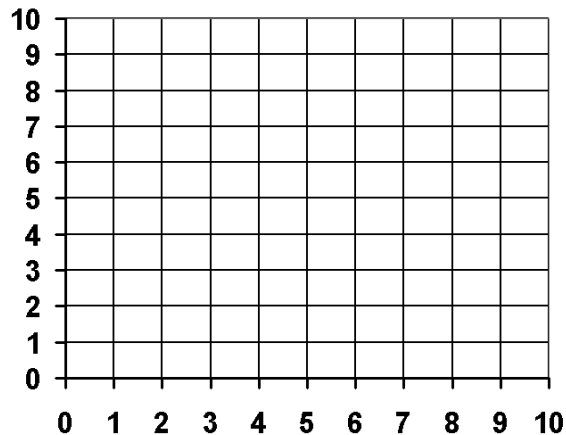
x	y	(x, y)
3		
6		
12		
15		



Application Problem:

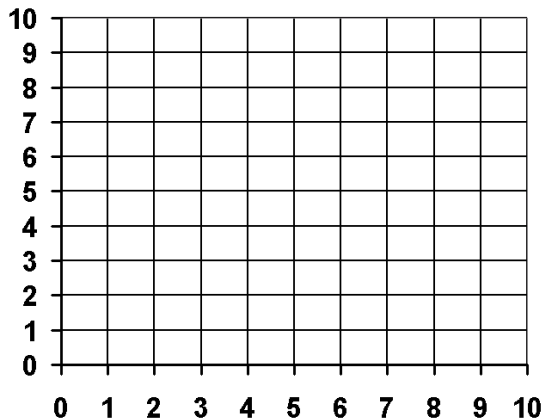
Frankie and Ricky are playing Battleship. They labeled their axes using just whole numbers.

a. Frankie's first guess is $(2, 2)$. Ricky says, "Hit!" Give the coordinates of four points that Frankie might guess next.



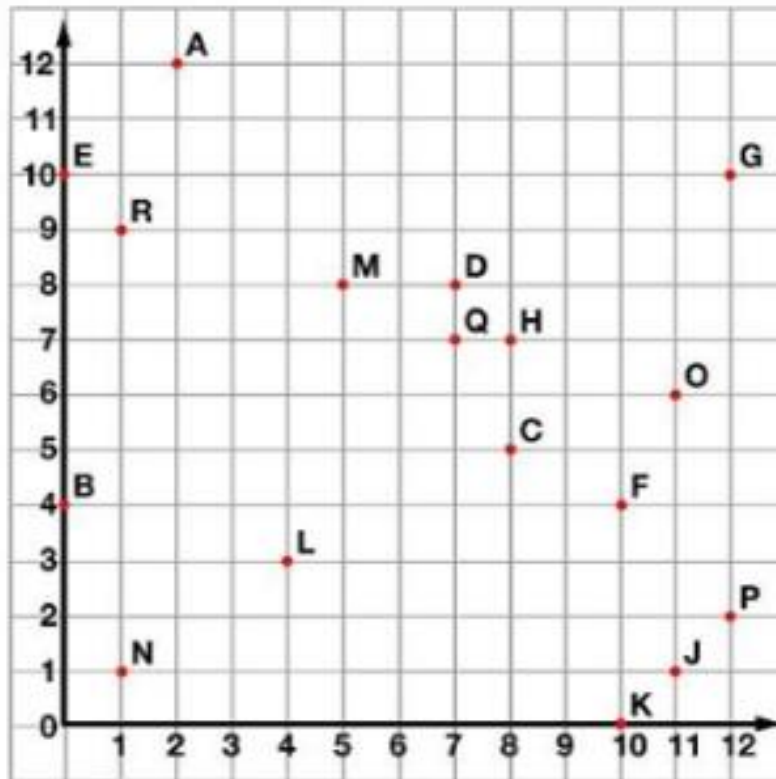
(,) (,) (,) (,)

b. Ricky says, "Hit!" for the points directly above and below $(2, 2)$. What are the coordinates that Frankie guessed?



(,) (,) (,) (,)

Problem 1:



Tell what point is located at each ordered pair.

- | | | |
|------------------|-----------------|-----------------|
| 1. (5,8) _____ | 2. (12,2) _____ | 3. (8,7) _____ |
| 4. (12,10) _____ | 5. (7,7) _____ | 6. (0,10) _____ |

Write the ordered pair for each given point.

- | | | |
|-------------|-------------|-------------|
| 7. N _____ | 8. L _____ | 9. J _____ |
| 10. A _____ | 11. B _____ | 12. E _____ |

Plot the following points on the coordinate grid.

- | | | |
|--------------|-------------|--------------|
| 13. S (6,11) | 14. T (3,5) | 15. U (9,12) |
|--------------|-------------|--------------|

Problem 2:

Complete the table for the given rules.

Line *a*

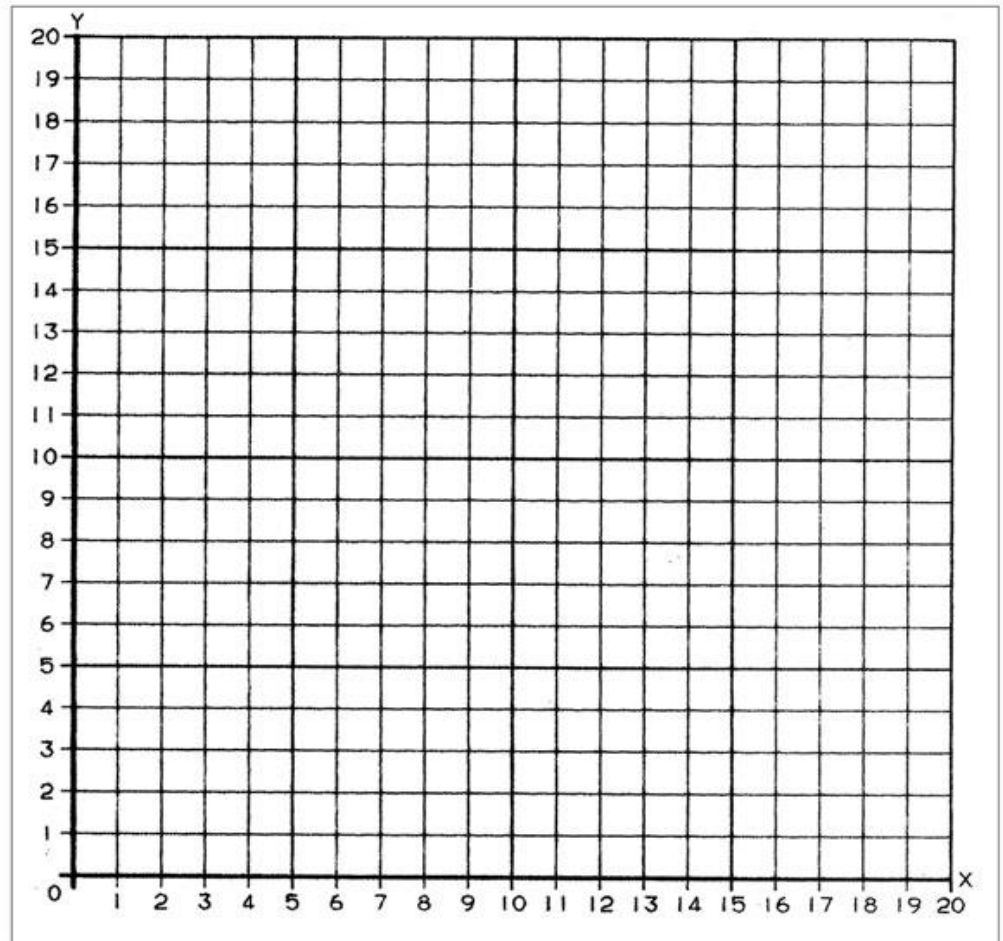
Rule: *y* is 1 less than *x*

<i>x</i>	<i>y</i>	(<i>x</i> , <i>y</i>)
1		
4		
9		
16		

Line *b*

Rule: *y* is 5 less than *x*

<i>x</i>	<i>y</i>	(<i>x</i> , <i>y</i>)
5		
8		
14		
20		



- Construct each line on the coordinate plane.
- Compare and contrast these lines.

Problem 3:

Line *p*

Rule: y is the same as x

x	y	(x, y)
0		
5		
10		
15		

Line *b*

Rule: y is 4 less than x

x	y	(x, y)
7		
10		
13		
18		

Line *c*

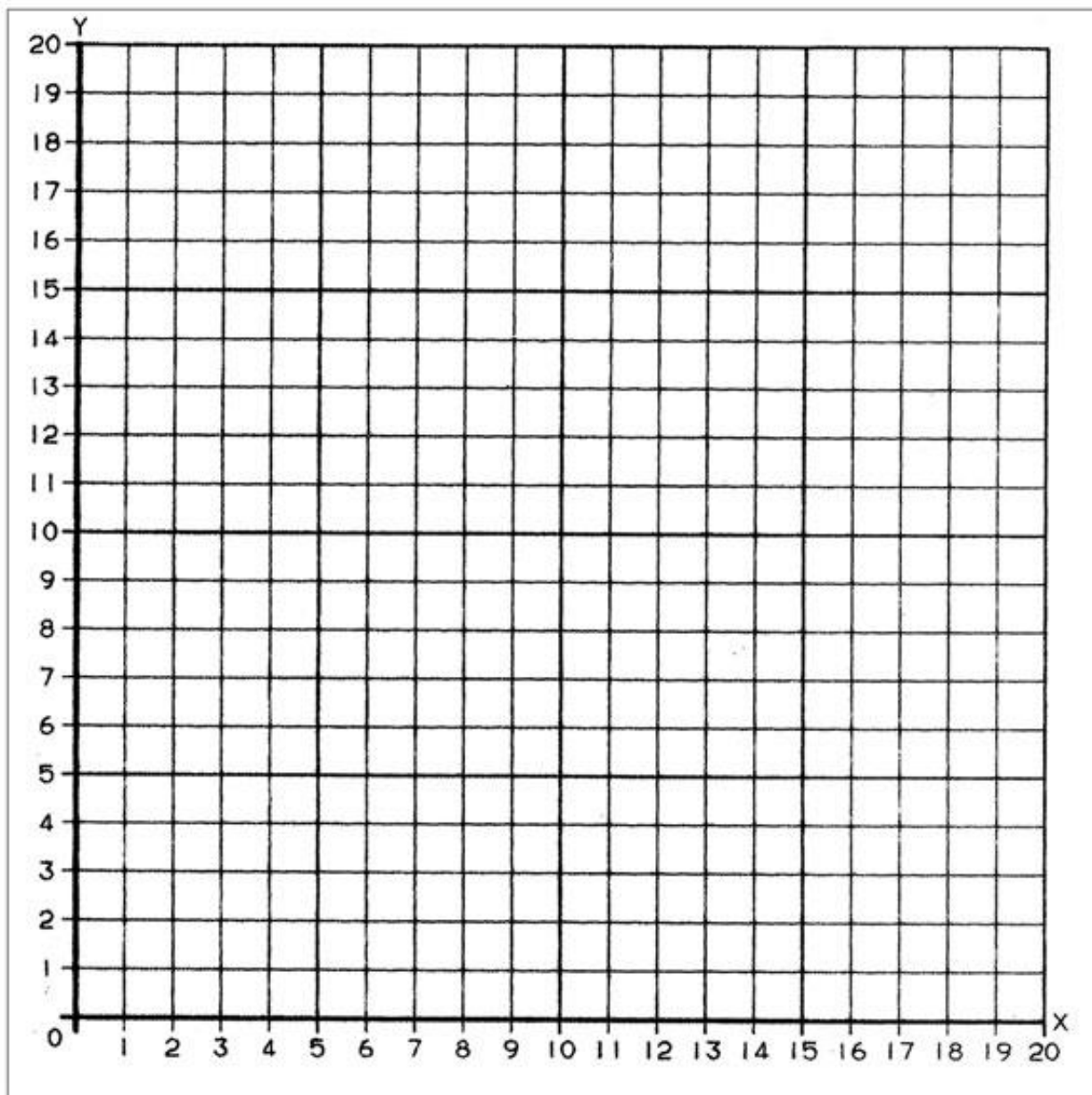
Rule: y is x times 2

x	y	(x, y)
2		
4		
8		
11		

Line *d*

Rule: y is 3 more than x

x	y	(x, y)
5		
7		
12		
15		



Problem 4:

Finish filling out the chart. Write the rule for the following charts:

	x	y	(x, y)
A	3	3	
B	6	6	
C	8	8	

Rule _____

	x	y	(x, y)
G	4	5	
H	1	2	
I	8	9	

Rule _____

	x	y	(x, y)
S	2	4	
T	3	6	
U	5	8	

Rule _____

Problem 5:

Find the y -coordinates by following the rules given for each table.

Table A: Multiply by $\frac{1}{2}$.

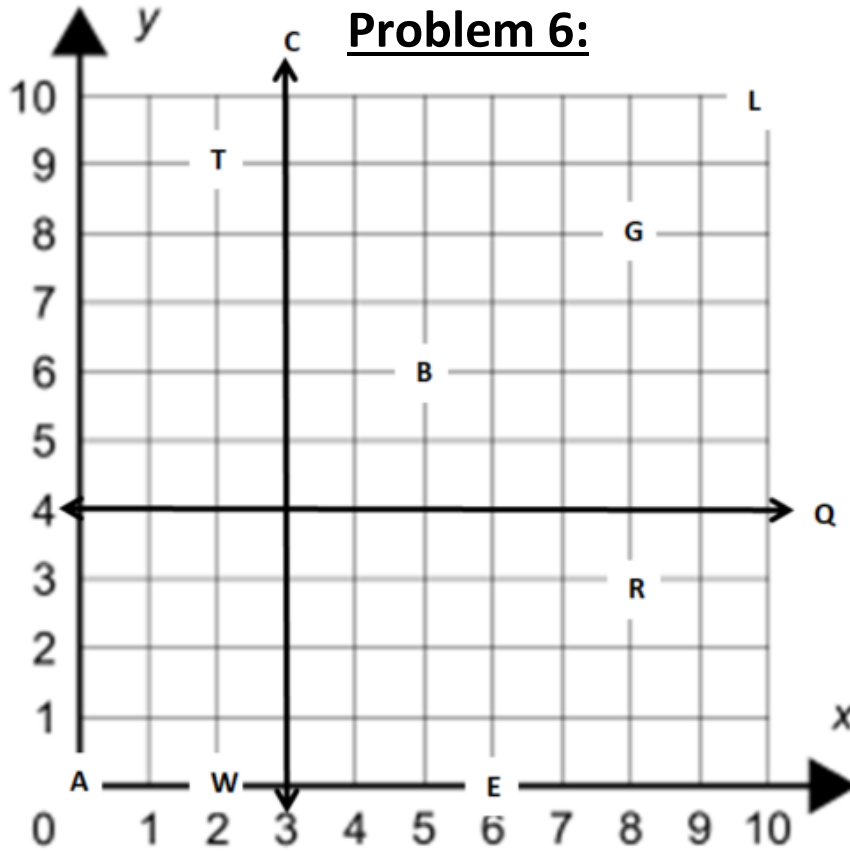
x	y
4	
5	
6	
7	

Problem 6:

Find the y -coordinates by following the rules given for each table.

Table B: Multiply by $\frac{1}{4}$.

x	y
5	
4	
3	
2	

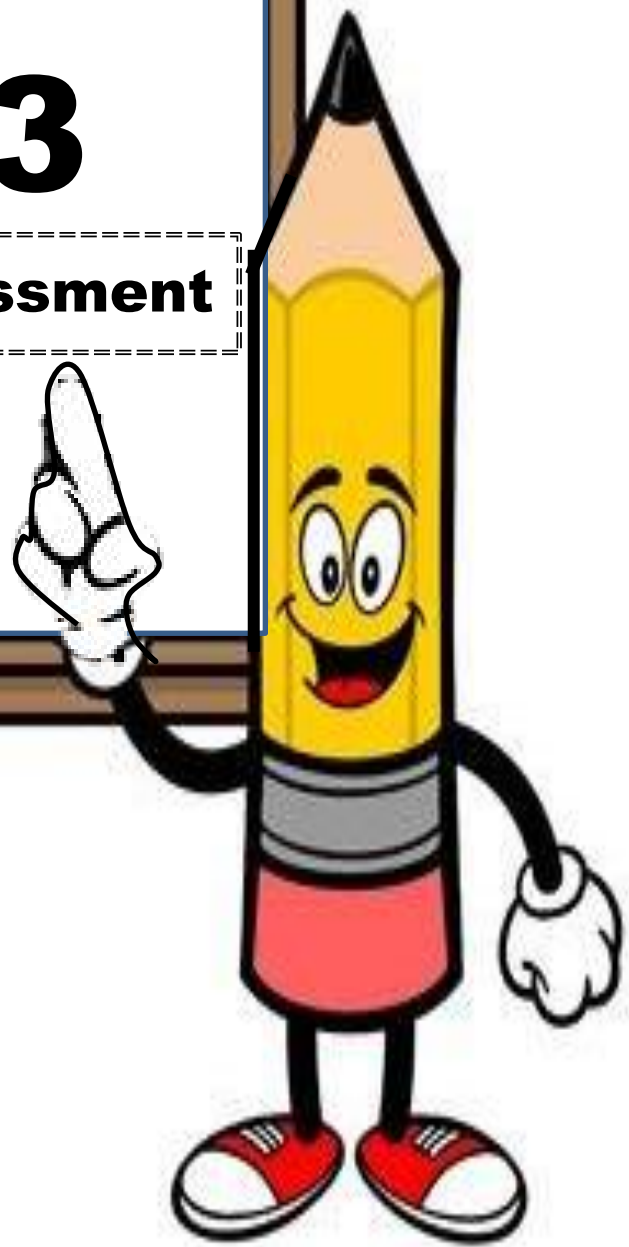


1. Which two points have the same x-axis? What is it? _____
2. Which two points have the same y-axis? What is it? _____
3. Line Q is _____ to the x-axis and _____ to the y-axis.
4. Line C is _____ to the y-axis and _____ to the x-axis.
5. Which point is located at the origin? _____
6. Which point is at (5, 6)? _____
7. What is the coordinate for point T? _____
8. Which point is located at (10, 10)? _____



Day # 3

Mid-Mod 6 SPA Assessment



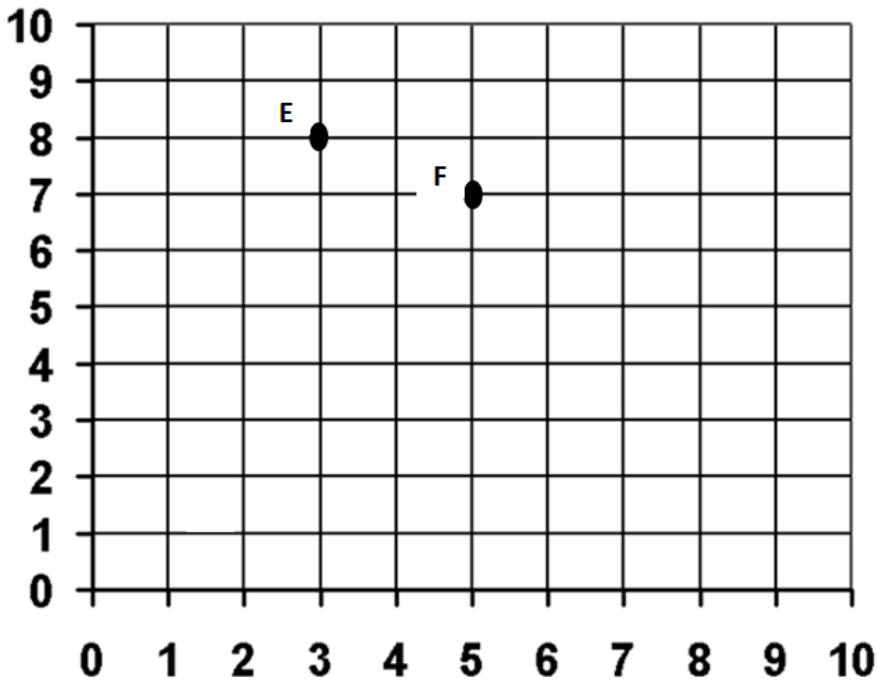
Name: _____ Week 36 Day 3 Date: _____

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Mid-Module 6 SPA Assessment:

Use the coordinate plane to answer questions 1 and 2.



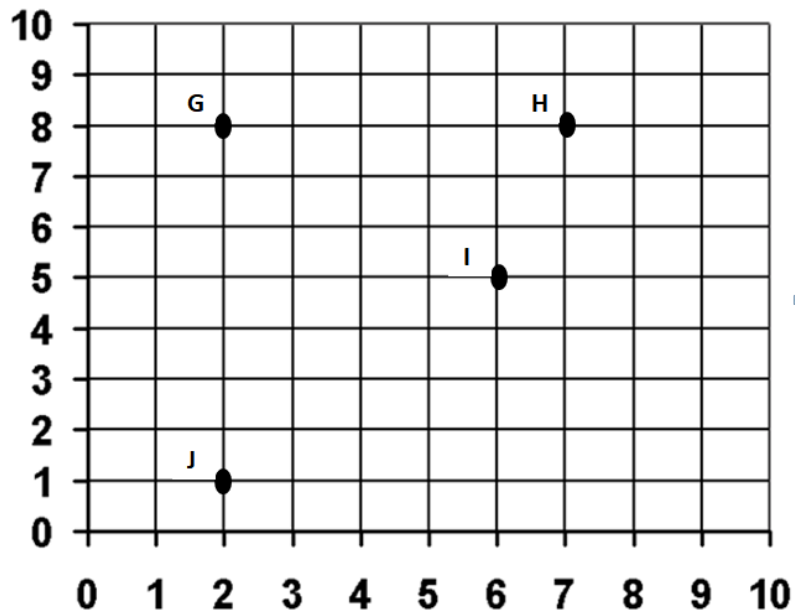
____ 1. Which statement is true about point E? (5.G.1)

- A. The x-coordinate is 8
- B. The y-coordinate is 3
- C. The ordered pair is (8,3)
- D. The ordered pair is (3,8)

____ 2. Which statement is false about point F? (5.G.1)

- A. The y-coordinate is 7
- B. The x-coordinate is 5
- C. The x and y coordinates are the same
- D. The ordered pair is (5,7)

Use the coordinate plane to answer questions 3-5.



_____ 3. Which is the location of point I? (5.G.1)

- A. (4, 6)
- B. (5, 6)
- C. (6, 4)
- D. (6, 5)

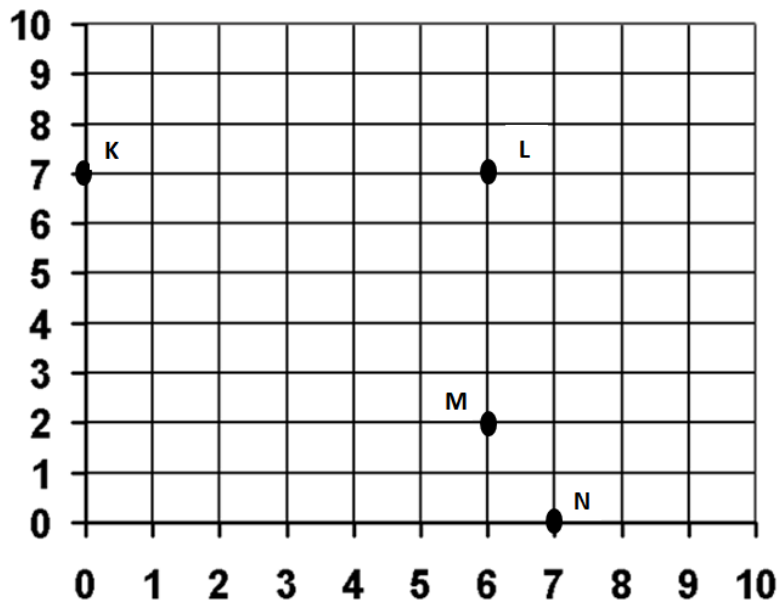
_____ 4. Which two points have the same x-coordinate? (5.G.2)

- A. G and H
- B. G and J
- C. H and I
- D. I and J

_____ 5. Point G has the same y-coordinate as point _____. (5.G.2)

- A. H
- B. J
- C. I
- D. The origin

Use the coordinate plane to answer questions 6-8.



_____ 6. Which point is located on the x-axis? (5.G.1)

- A. K
- B. L
- C. M
- D. N

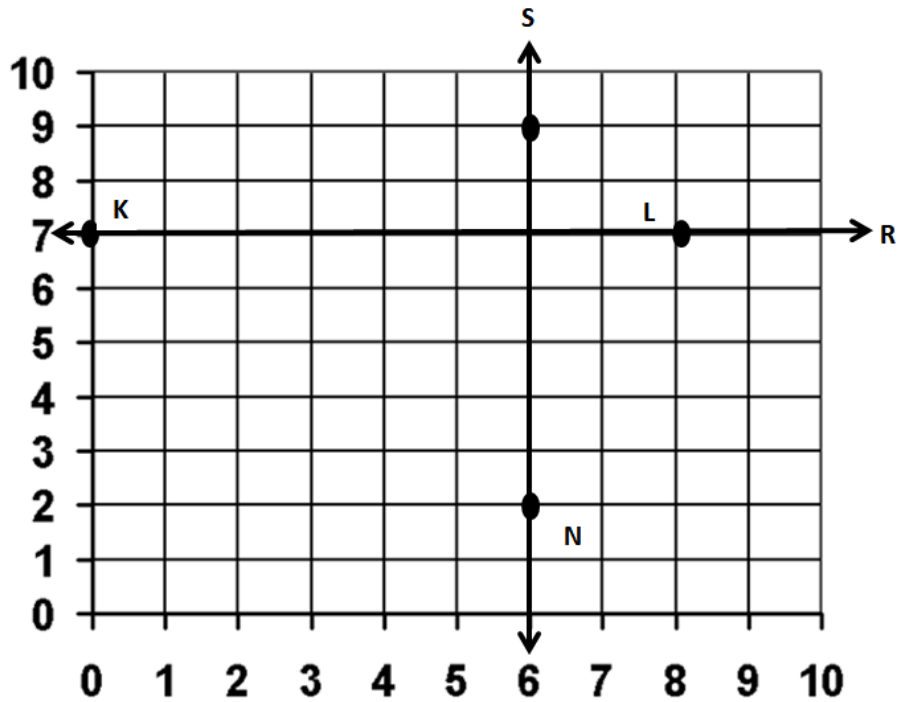
_____ 7. Which is the location of point M? (5.G.1)

- A. (2, 6)
- B. (3, 6)
- C. (6, 2)
- D. (6, 3)

_____ 8. Which point is located on the y-axis? (5.G.1)

- A. K
- B. L
- C. M
- D. N

Use the coordinate plane to answer questions 9-10.

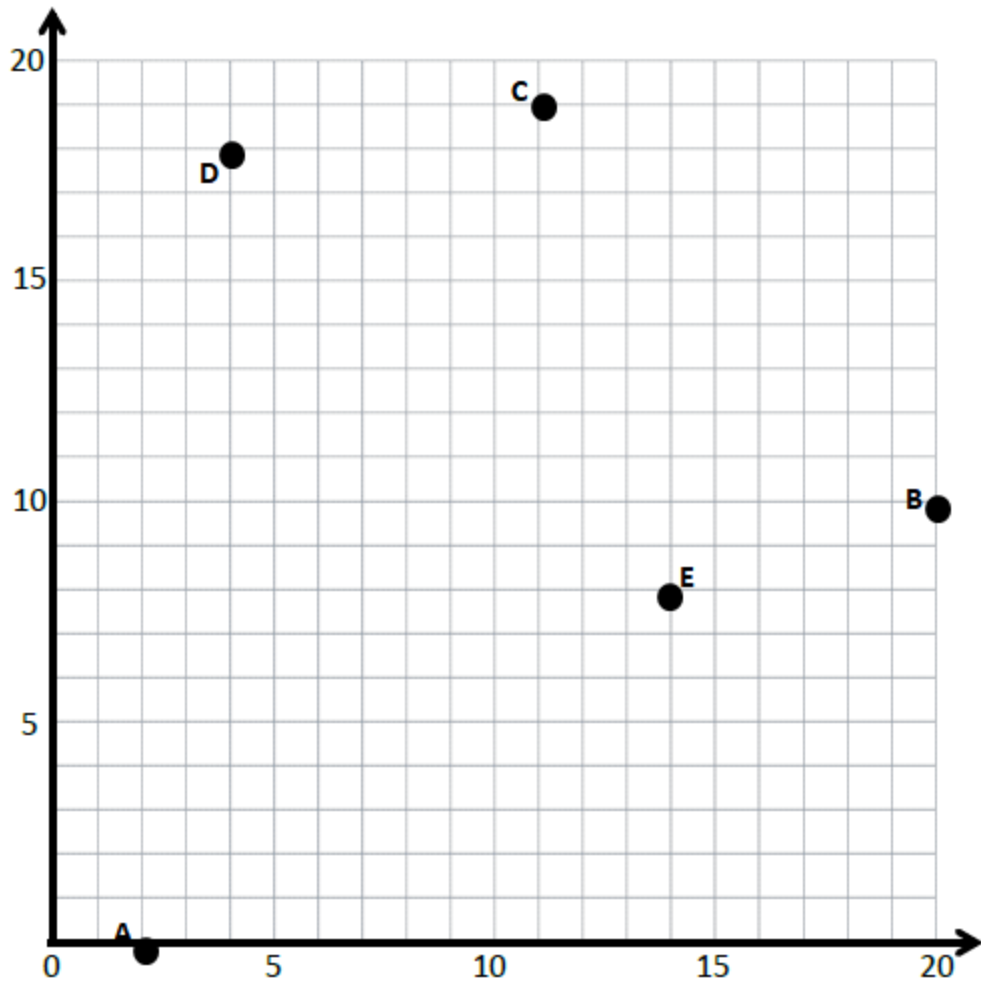


_____ 9. Line R is _____ to the x-axis and _____ to the y-axis. (5.G.1)

- A. parallel and perpendicular
- B. perpendicular and parallel
- C. parallel and parallel
- D. perpendicular and perpendicular

_____ 10. Line S is _____ to the x-axis and _____ to the y-axis. (5.G.1)

- A. parallel and perpendicular
- B. perpendicular and parallel
- C. parallel and parallel
- D. perpendicular and perpendicular



11. Plot each point in the coordinate plane above, and label each point with F , G , or H .

(5.G.1)

$F (7, 14)$

$G (0, 12)$

$H (17, 20)$

12. Complete the chart for the given rules. (5.G.2)

Line a

Rule: y is 1 more than x

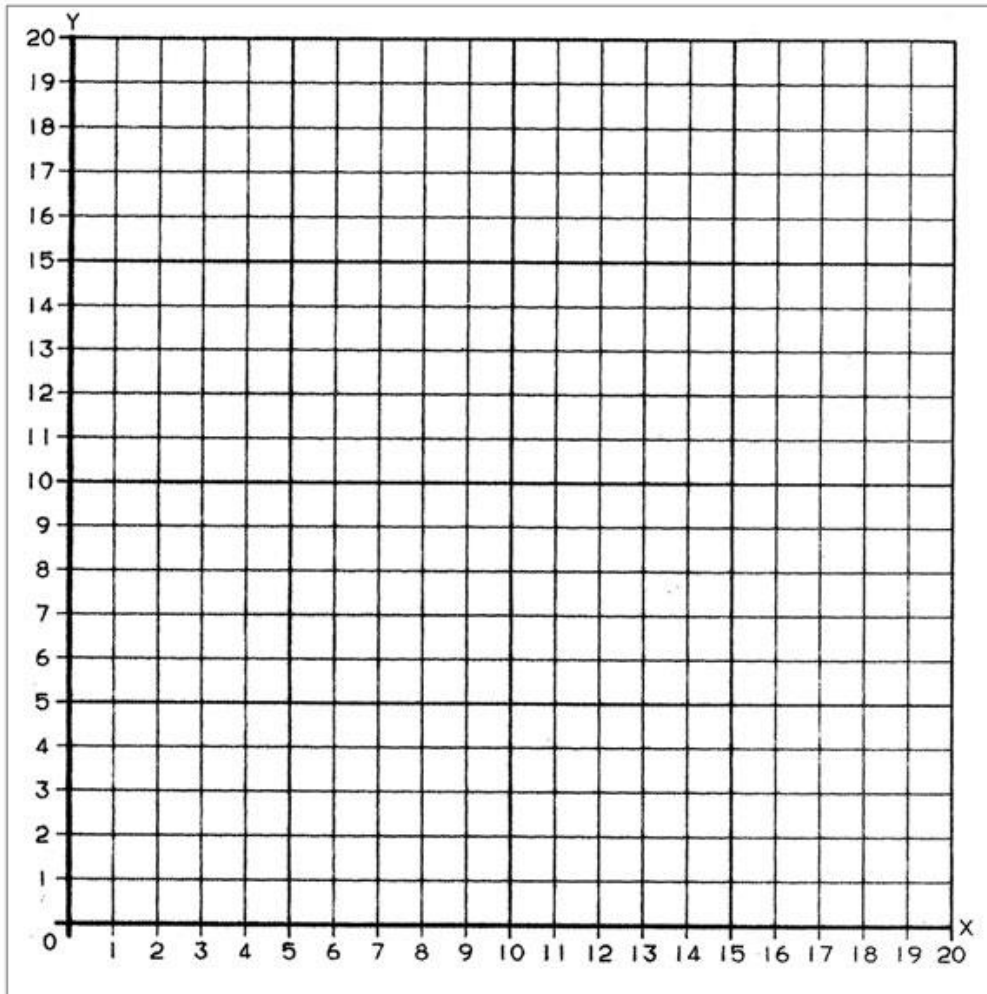
x	y	(x, y)
1		
5		
9		
13		

Line b

Rule: y is 4 more than x

x	y	(x, y)
0		
5		
8		
11		

13. Draw each line on the coordinate plane. (5.G.2)



14. Write the rule for the following charts: (5.G.2)

a.

Point	(x, y)
L	$(0, 3)$
M	$(2, 3)$
N	$(4, 3)$

b.

Point	(x, y)
O	$(0, 0)$
P	$(1, 2)$
Q	$(2, 4)$

c.

Point	(x, y)
R	$(1, \frac{1}{2})$
S	$(2, 1\frac{1}{2})$
T	$(3, 2\frac{1}{2})$

d.

Point	(x, y)
U	$(1, 3)$
V	$(2, 6)$
W	$(3, 9)$

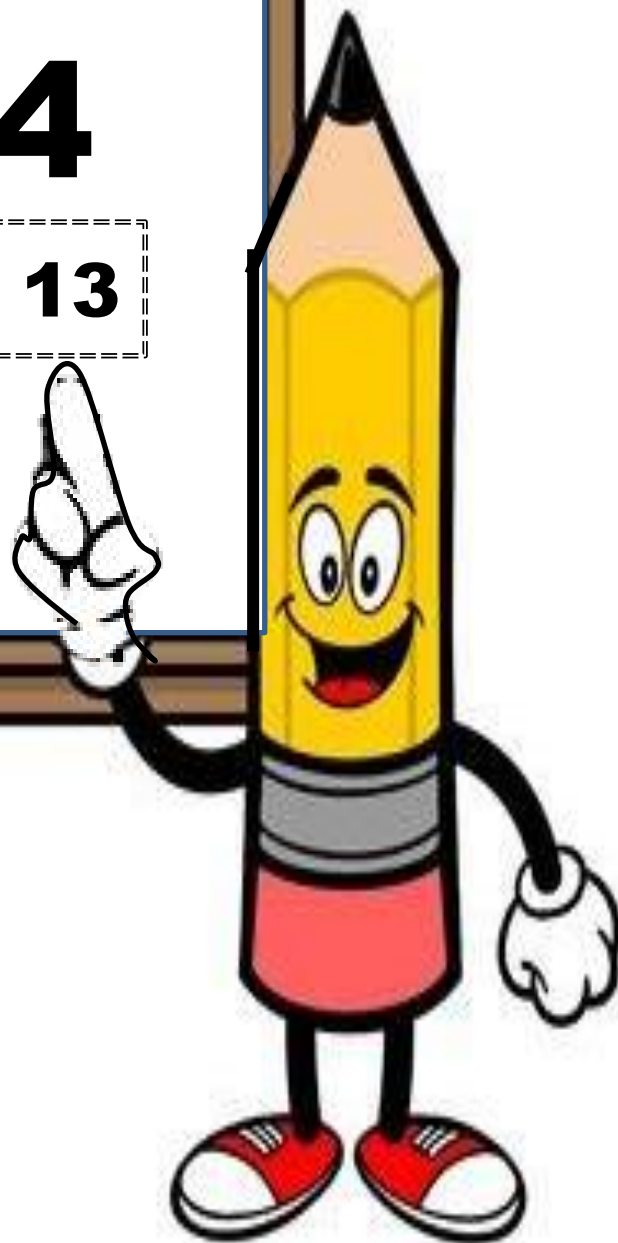
a: _____ b: _____

c: _____ d: _____



Day # 4

Mod 6 Packet 13



Name: _____ Week 36 Day 4 Date: _____

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Do Now

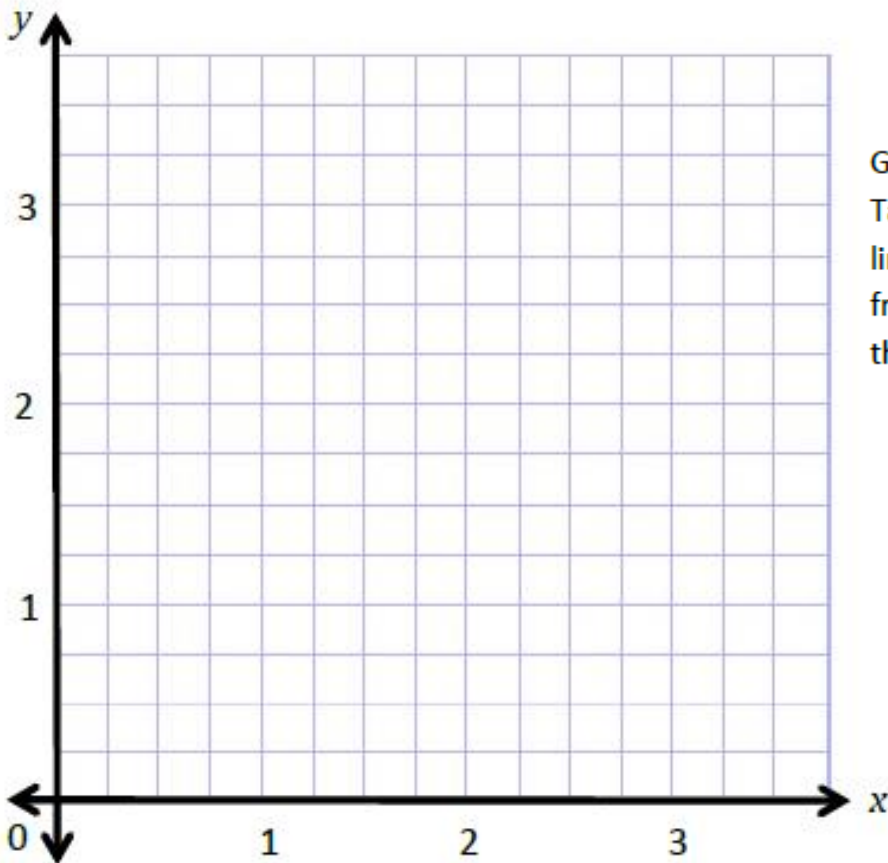
Find the y -coordinates by following the rules given for each table.

Table A: Multiply by $\frac{1}{2}$.

x	y
0	
1	
2	
3	

Table B: Multiply by $\frac{1}{4}$.

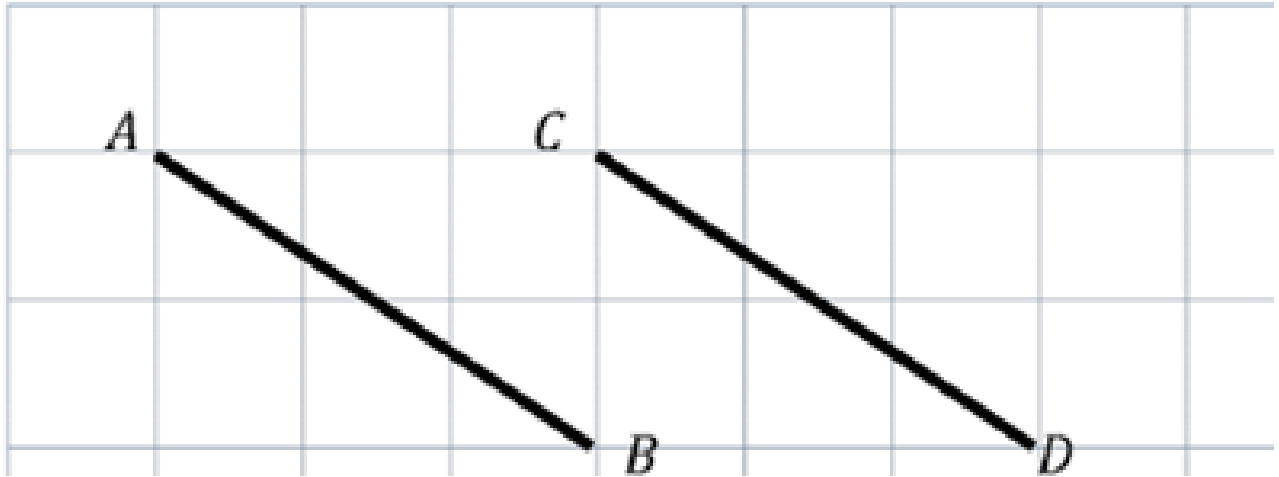
x	y
0	
1	
2	
3	



Graph and label the coordinate pairs from Table A. Connect the points, and label the line a . Graph and label the coordinate pairs from Table B. Connect the points, and label the line b .

Problem 1:

Identifying parallel lines



Is line AB parallel to line CD? _____

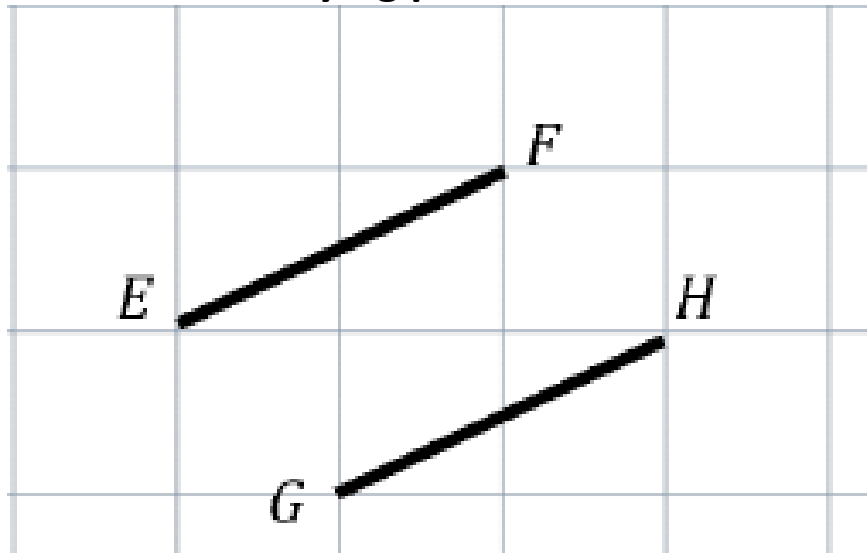
How do you know? _____

Create a right triangle using line AB.

Create a right triangle using line CD.

Problem 2:

Identifying parallel lines



Is line EF parallel to line GH? _____

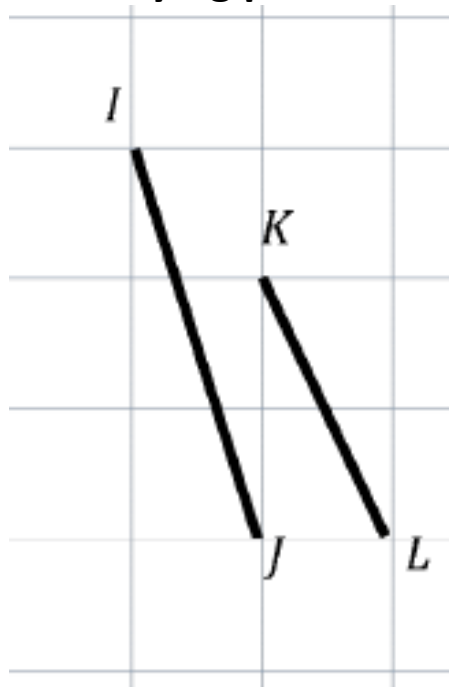
How do you know? _____

Create a right triangle using line EF.

Create a right triangle using line GH.

Problem 3:

Identifying parallel lines



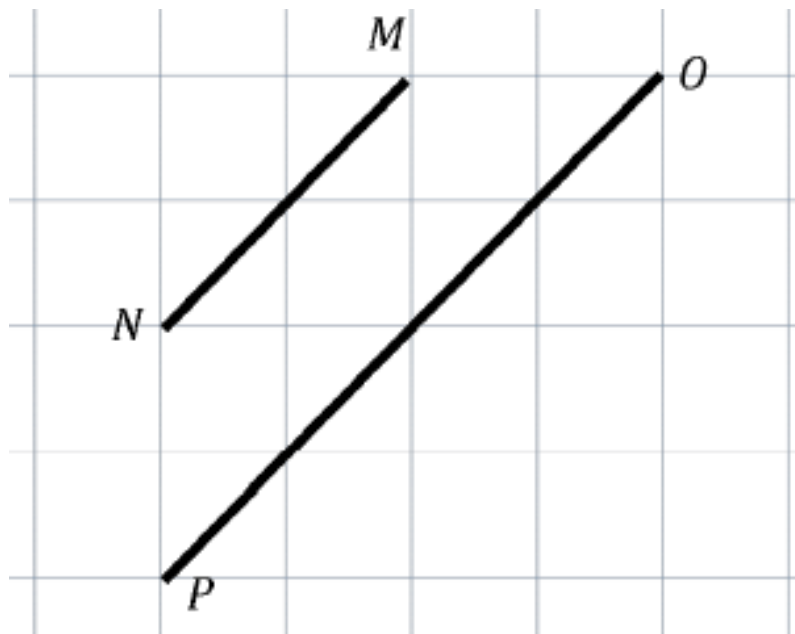
Is line IJ parallel to line KL? _____

How do you know? _____

Extend both lines and explain what happened when you extended the line. _____

Problem 4:

Identifying parallel lines



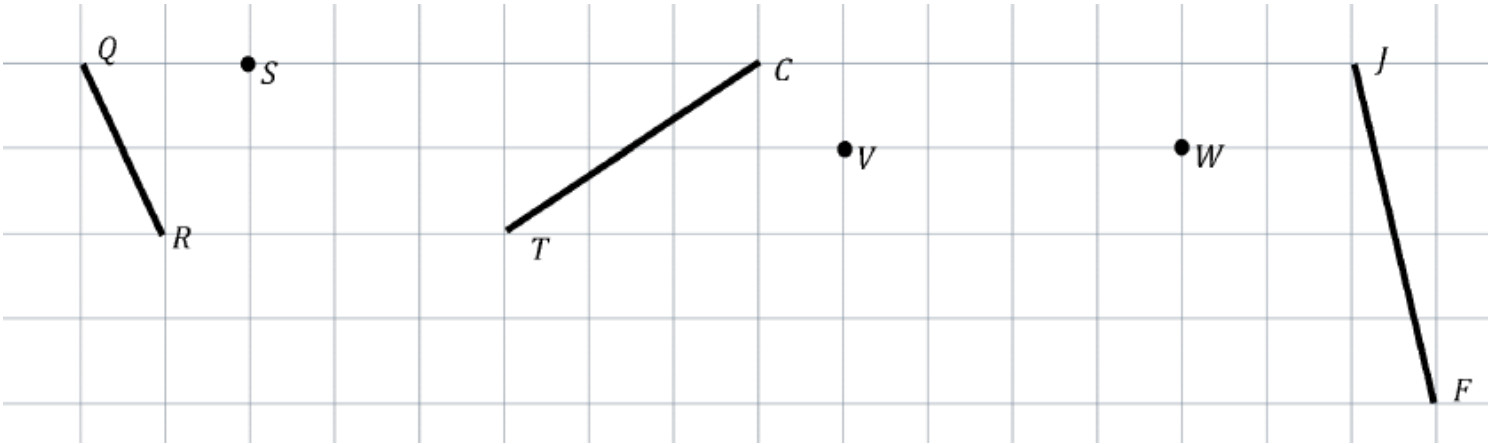
Is line MN parallel to line OP? _____

How do you know? _____

Extend both lines and explain what happened when you extended the line. _____

Problem 5:

Create Parallel Lines



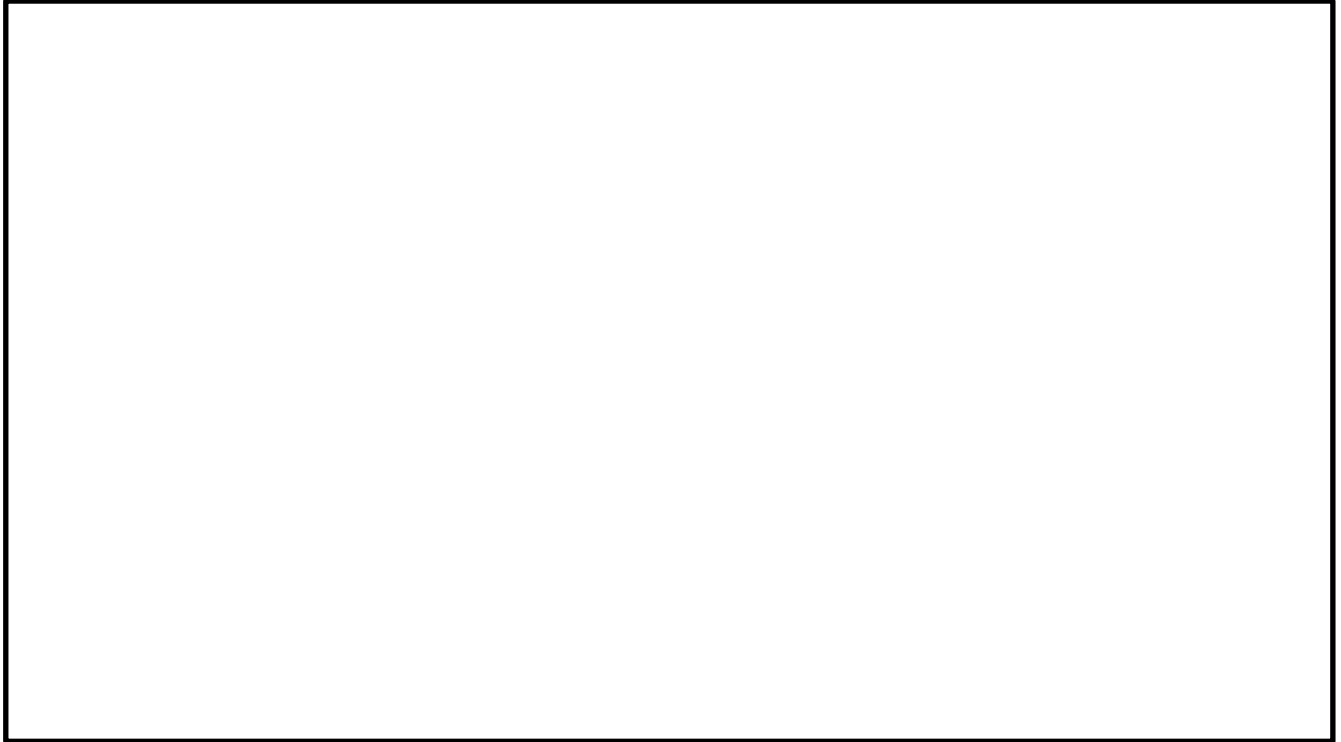
Problem 6:

Create Parallel Lines



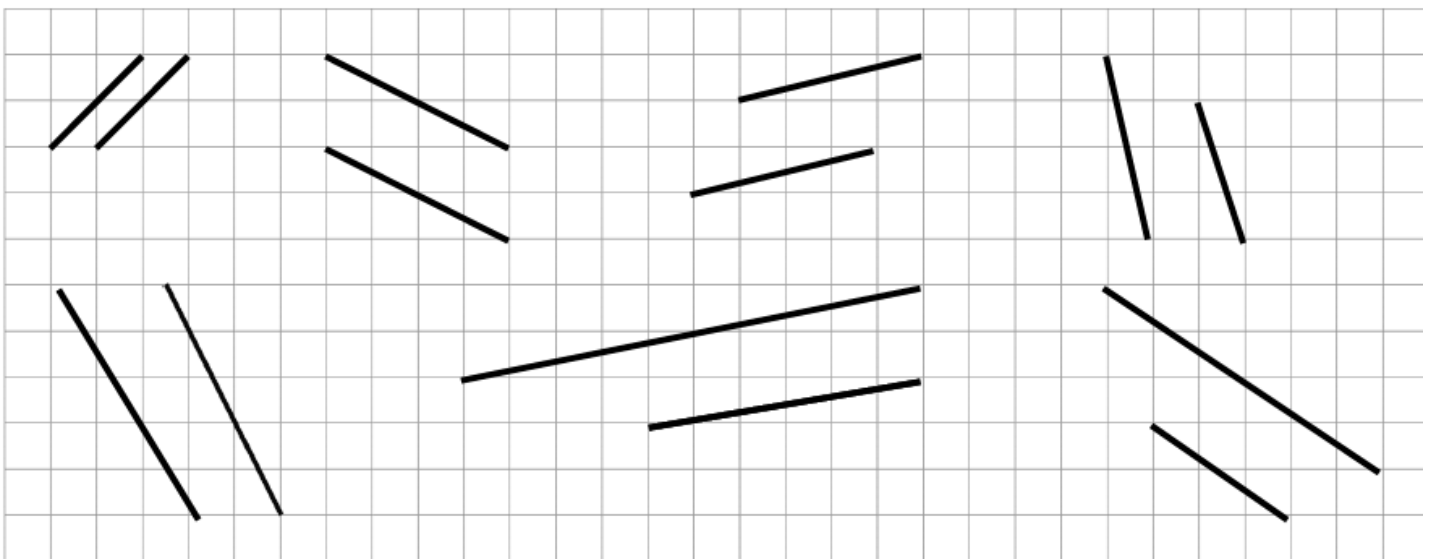
Problem 7:

Use a straightedge to draw at least four sets of parallel lines in the space below.



Problem 8:

Circle the segments that are parallel.



Problem Set:

Use your straightedge to draw a segment parallel to each segment through the given point.

The grid contains six sub-problems, each with a segment and a point:

- a.** A vertical segment on the left side of the grid. Point *S* is located on the top horizontal line, two grid units to the right of the segment.
- b.** A horizontal segment in the upper-middle part of the grid. Point *T* is located on the middle horizontal line, one grid unit to the left of the segment.
- c.** A diagonal segment sloping upwards from left to right. Point *U* is located on the top horizontal line, four grid units to the right of the segment.
- d.** A diagonal segment sloping upwards from left to right. Point *V* is located on the bottom horizontal line, one grid unit to the left of the segment.
- e.** A diagonal segment sloping downwards from left to right. Point *W* is located on the middle horizontal line, two grid units to the right of the segment.
- f.** A diagonal segment sloping downwards from left to right. Point *Z* is located on the middle horizontal line, four grid units to the right of the segment.

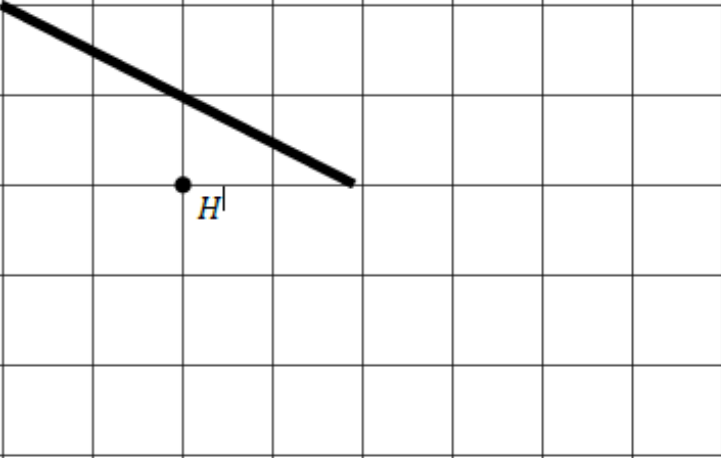
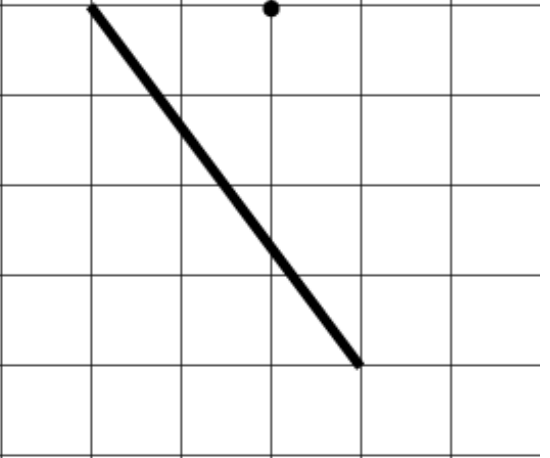
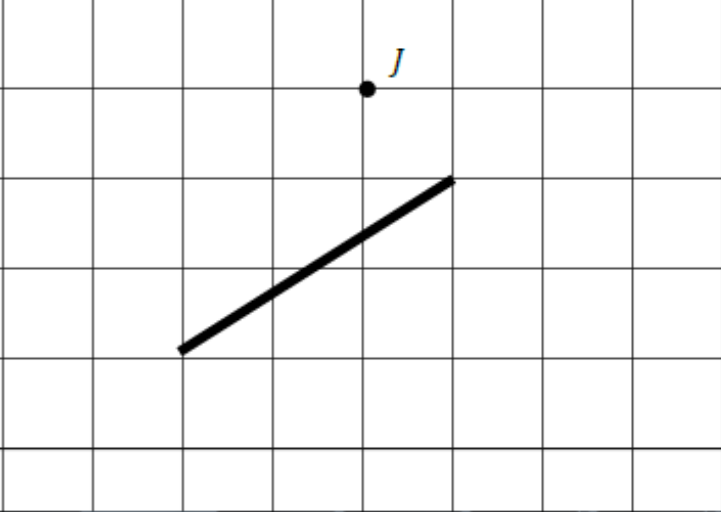
Application Problem:

Draw 2 different lines parallel to line *b*.

The grid shows a line labeled *b* with arrows at both ends, sloping upwards from left to right. The line passes through the intersection of the 5th vertical line and the 3rd horizontal line from the bottom. There is space above and below line *b* for drawing two parallel lines.

Exit Ticket:

Use your straightedge to draw a segment parallel to each segment through the given point.

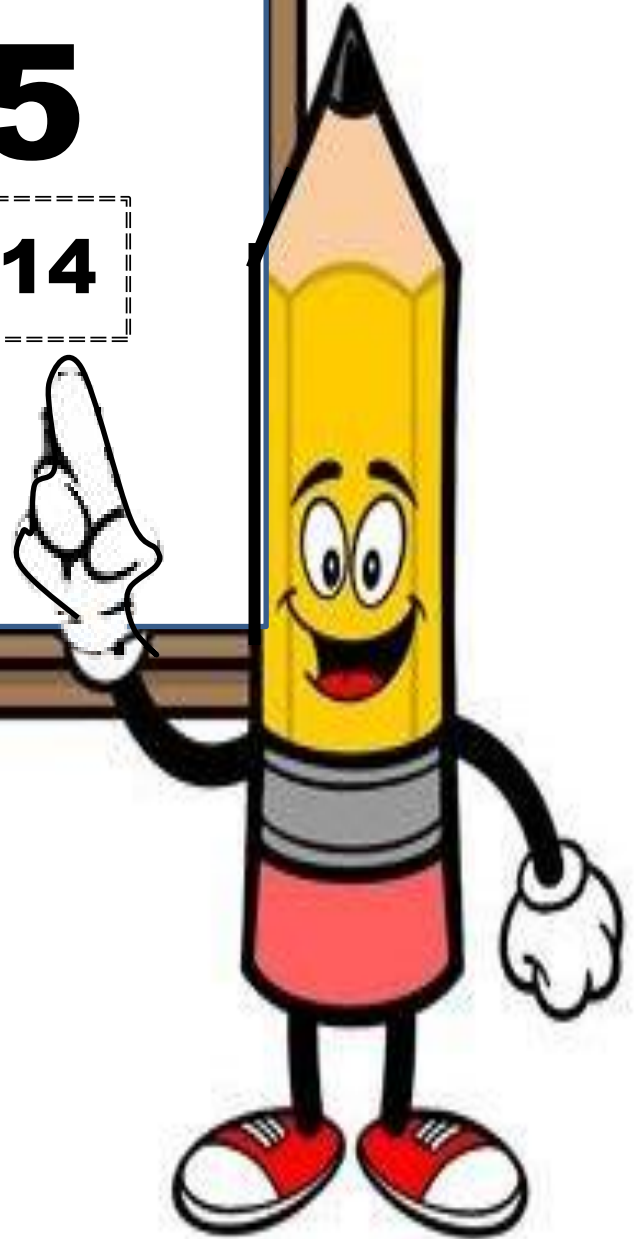
a.		b.	
			
c.			



Brighter Choice
Charter School for Boys

Day # 5

Mod 6 Packet 14



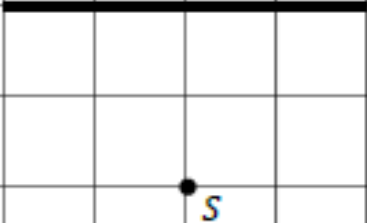
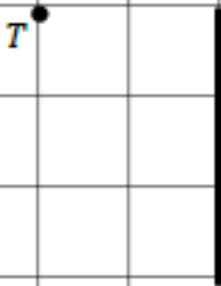


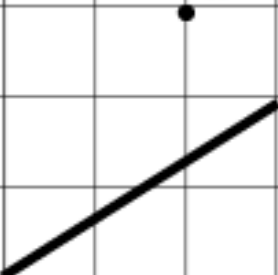
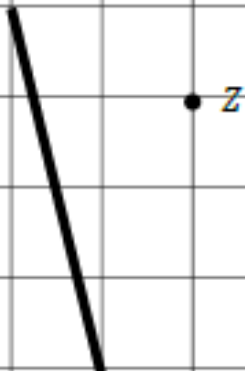
Name: _____ Week 36 Day 5 Date: _____

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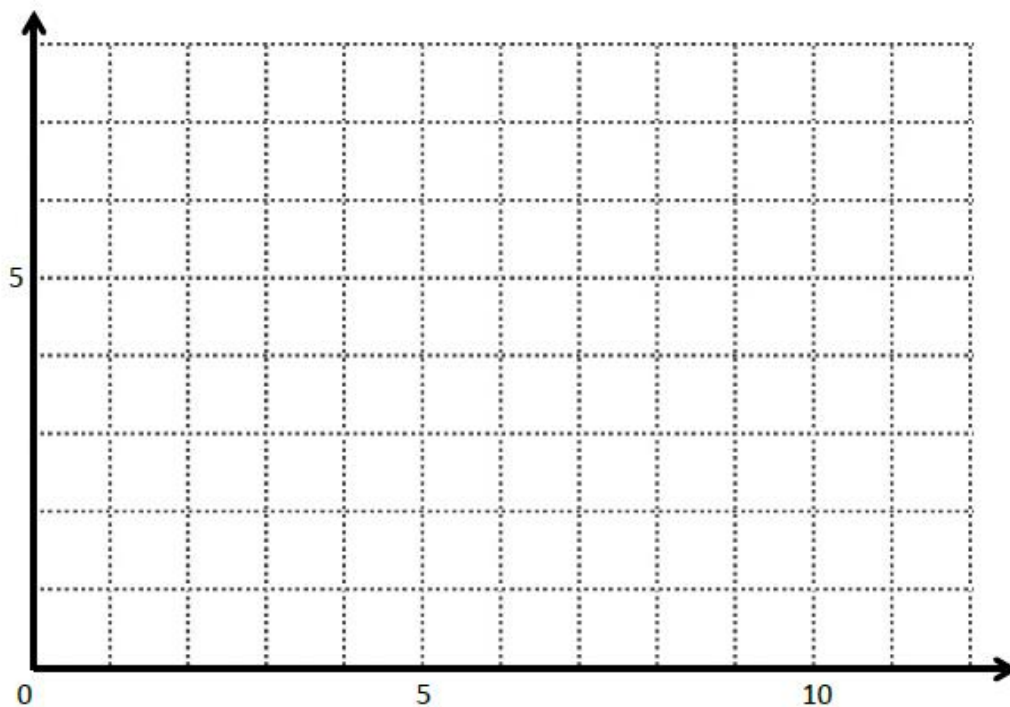
Do Now

Use your straightedge to draw a segment parallel to each segment through the given point.

a.	b.	c.
		
d.	e.	f.
		

Input Activity:

Problem 1:



Plot A at (2, 3) and B at (7,5)

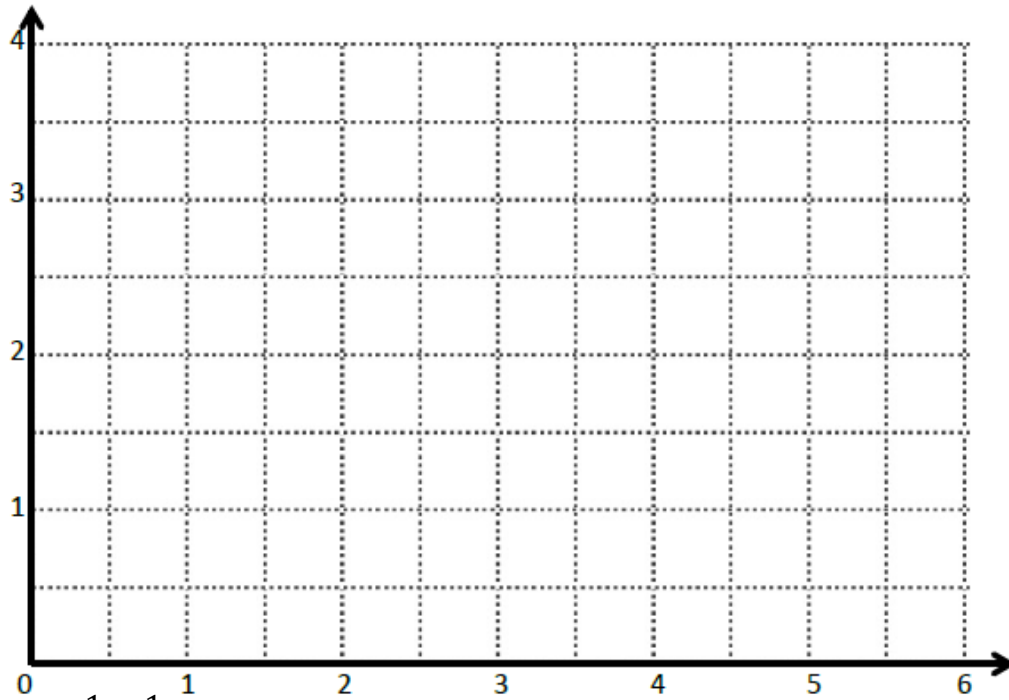
Draw \overleftrightarrow{AB}

Plot S (4, 2)

Where would T be if you wanted to connect it to S and create a parallel line \overleftrightarrow{ST} to line \overleftrightarrow{AB} ? (____, ____)

Compare the coordinates of points A and B to the coordinates of points S and T. _____

Problem 2:



Plot C at $(1\frac{1}{2}, 2\frac{1}{2})$ and D at $(3, 2)$

Draw \overleftrightarrow{CD}

Plot E $(\frac{1}{2}, 2\frac{1}{2})$

Where would F be if you wanted to connect it to E and create a parallel line \overleftrightarrow{EF} to line \overleftrightarrow{CD} ? (____, ____). Draw \overleftrightarrow{EF} . _____

Compare the coordinates of points C and D to the coordinates of points E and F. _____

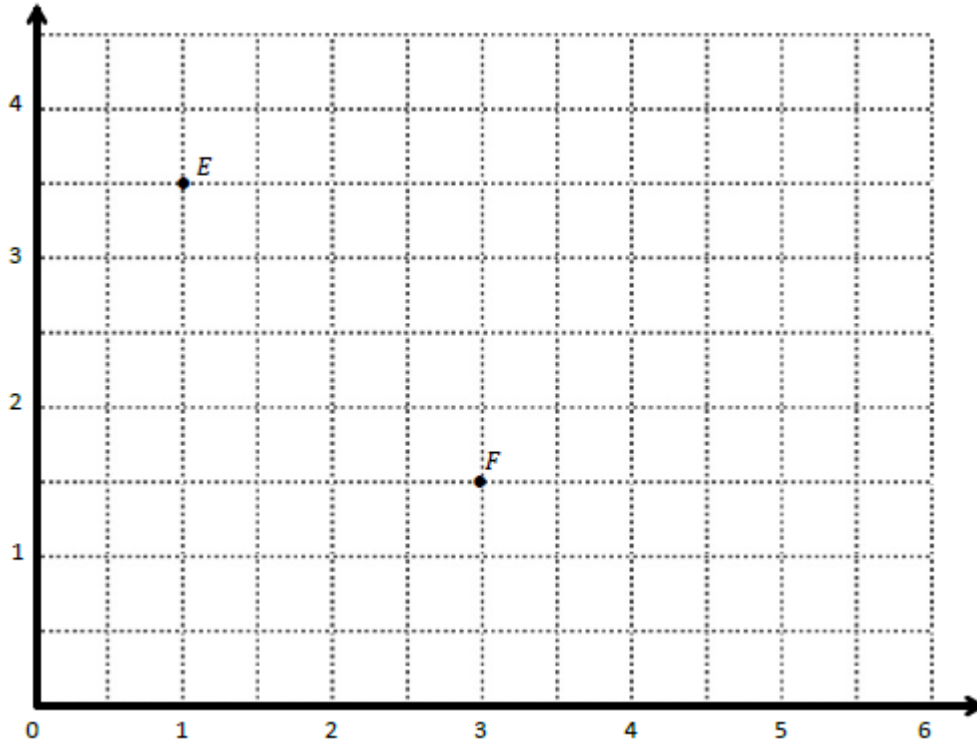
Plot point G $(3\frac{1}{2}, 2\frac{1}{2})$

Name a location of point H that when connected to G would create a segment parallel to line \overleftrightarrow{CD} ? (____, ____)

Draw \overleftrightarrow{GH} and write a statement about the relationship between these lines. _____

Problem 3:

Use the coordinate plane below to complete the following tasks.



a. Identify the locations of E and F . E : (____, ____) F : (____, ____)

b. Draw \overleftrightarrow{EF} .

c. Generate coordinate pairs for L and M , such that $\overleftrightarrow{EF} \parallel \overleftrightarrow{LM}$.

L : (____, ____) M : (____, ____)

d. Draw \overleftrightarrow{LM} .

e. Explain the pattern you made use of when generating coordinate pairs for L and M .

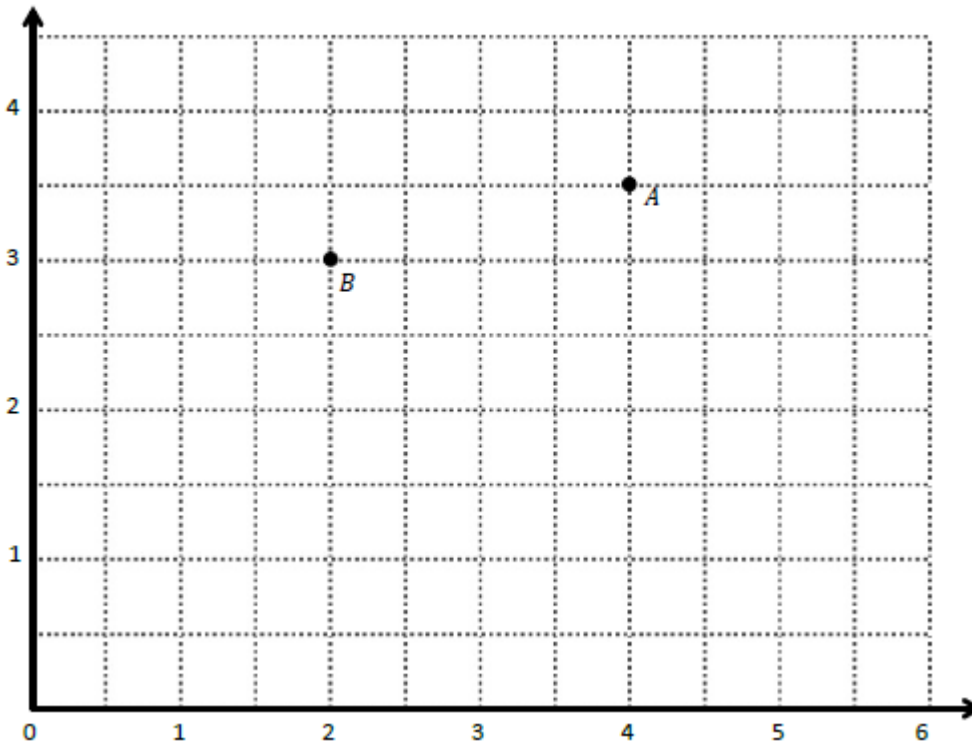
f. Give the coordinates of a point, H , such that $\overleftrightarrow{EF} \parallel \overleftrightarrow{GH}$.

G : $(1\frac{1}{2}, 4)$ H : (____, ____)

g. Explain how you chose the coordinates for H .

Problem Set:

Use the coordinate plane below to complete the following tasks.



a. Identify the locations of A and B . A : (____, ____) B : (____, ____)

b. Draw \overleftrightarrow{AB} .

c. Generate coordinate pairs for C and D , such that $\overleftrightarrow{AB} \parallel \overleftrightarrow{CD}$.

C : (____, ____) D : (____, ____)

d. Draw \overleftrightarrow{CD} .

e. Explain the pattern you used when generating coordinate pairs for C and D .

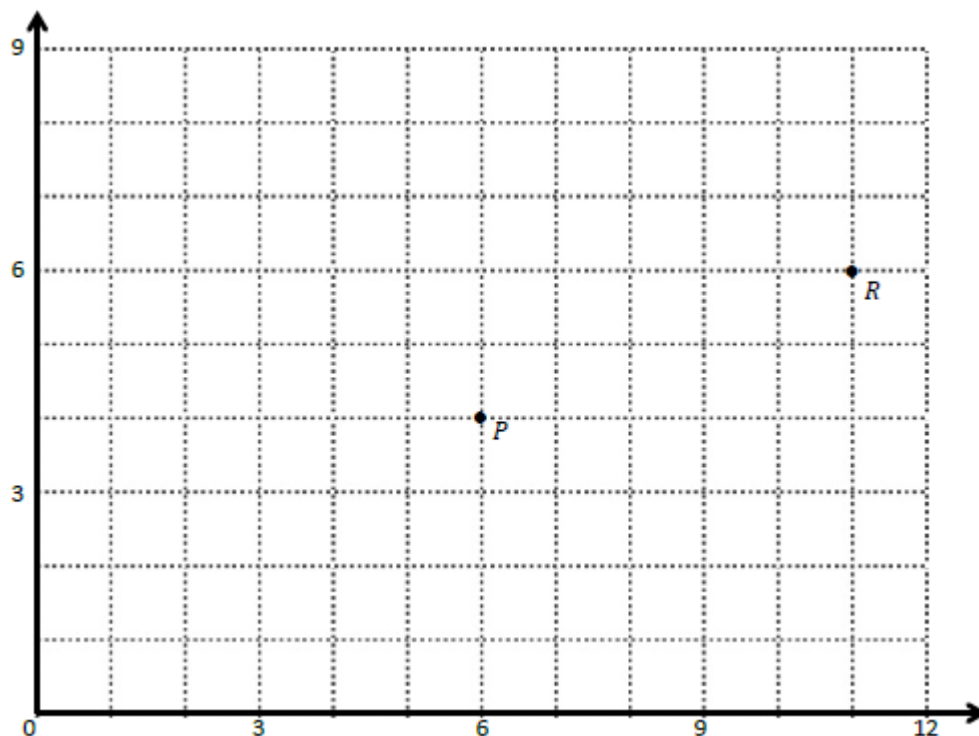
f. Give the coordinates of a point, F , such that $\overleftrightarrow{AB} \parallel \overleftrightarrow{EF}$.

E : $(2\frac{1}{2}, 2\frac{1}{2})$ F : (____, ____)

g. Explain how you chose the coordinates for F .

Application Problem:

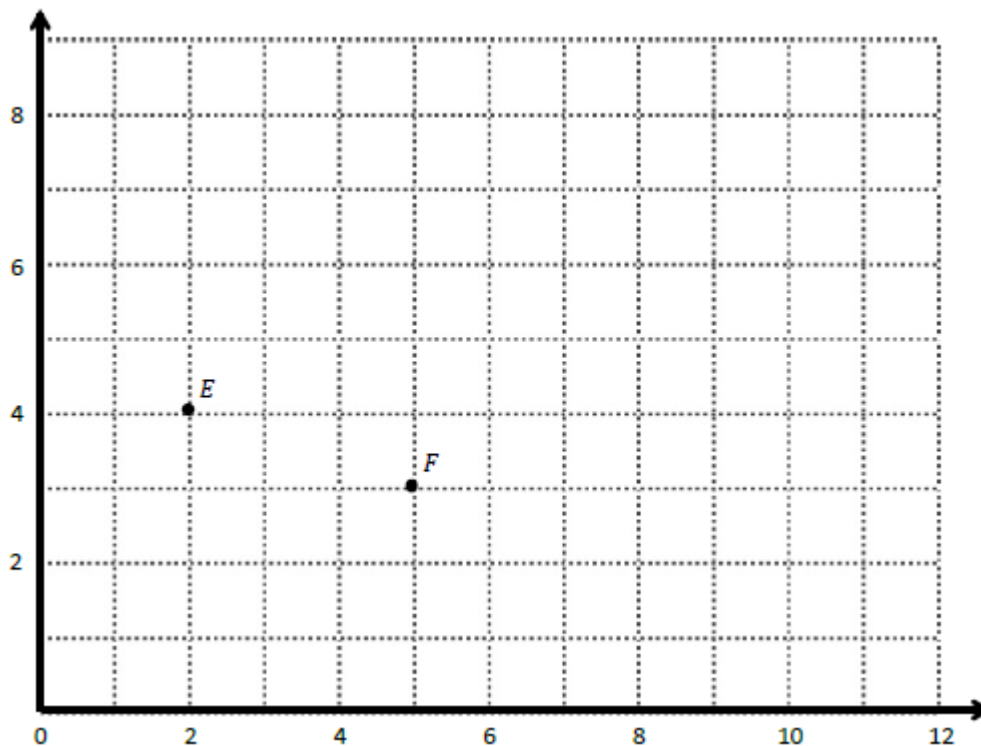
Use the coordinate plane below to complete the following tasks.



- Identify the locations of P and R . P : (____, ____) R : (____, ____)
- Draw \overrightarrow{PR} .
- Plot the following coordinate pairs on the plane.
 S : (6, 7) T : (11, 9)
- Draw \overrightarrow{ST} .
- Circle the relationship between \overrightarrow{PR} and \overrightarrow{ST} . $\overrightarrow{PR} \perp \overrightarrow{ST}$ $\overrightarrow{PR} \parallel \overrightarrow{ST}$
- Give the coordinates of a pair of points, U and V , such that $\overrightarrow{UV} \parallel \overrightarrow{PR}$.
 U : (____, ____) V : (____, ____)
- Draw \overrightarrow{UV} .

Exit Ticket:

Use the coordinate plane below to complete the following tasks.



- Identify the locations of E and F . E : (____, ____) F : (____, ____)
- Draw \overleftrightarrow{EF} .
- Generate coordinate pairs for L and M , such that $\overleftrightarrow{EF} \parallel \overleftrightarrow{LM}$.
 L : (____, ____) M : (____, ____)
- Draw \overleftrightarrow{LM} .



Name _____

5th Grade Math Remote Learning Packet

Week 37



Dear Educator,

My signature is proof that I have reviewed my scholar's work and supported him to the best of my ability to complete all assignments.

(Parent Signature)

(Date)

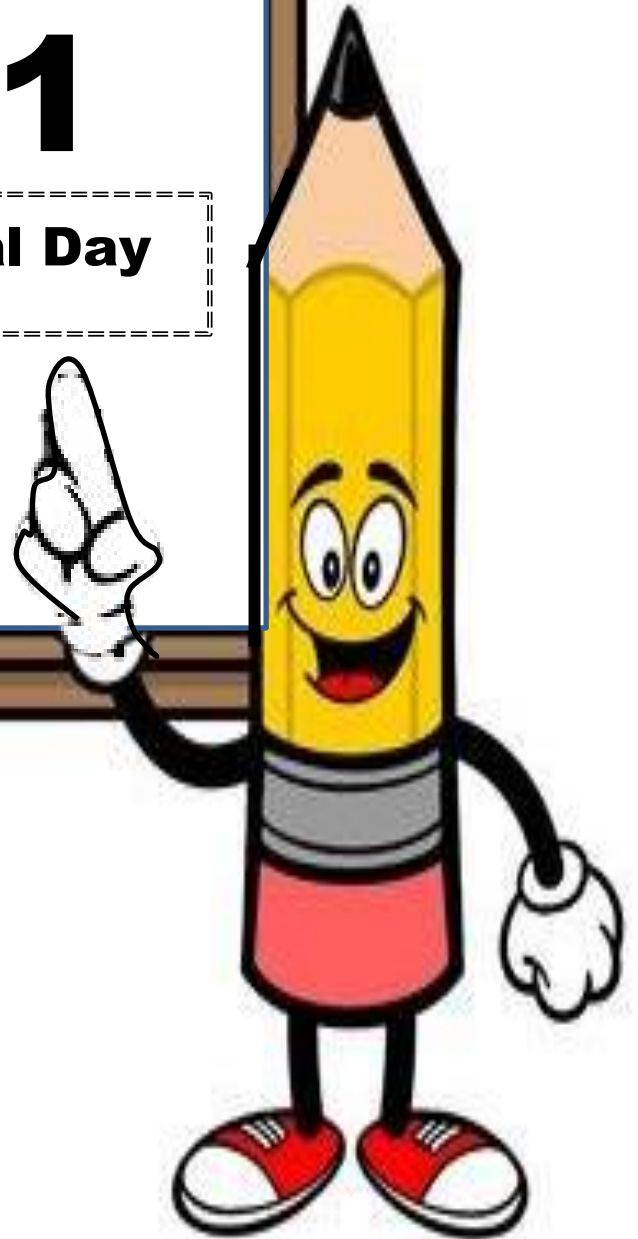
Parents please note that all academic packets are also available on our website at www.brighterchoice.org under the heading "Remote Learning." All academic packet assignments are mandatory and must be completed by all scholars.



Brighter Choice
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Day # 1

No School – Memorial Day

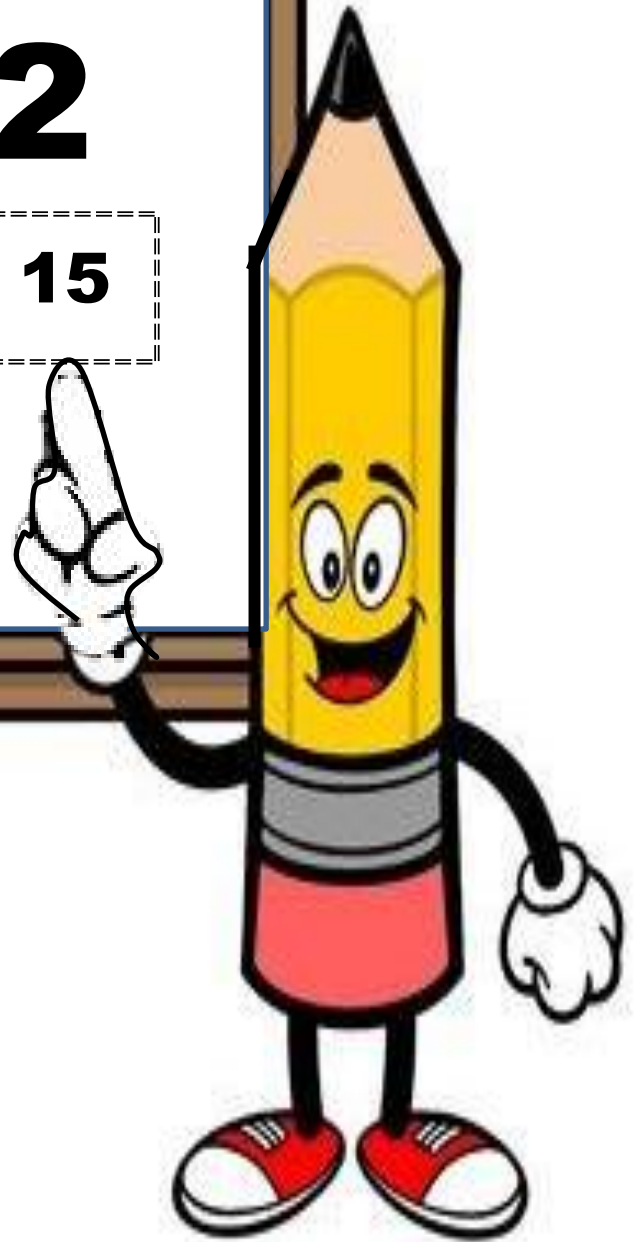




Brighter Choice
Charter School for Boys

Day # 2

Mod 6 Packet 15



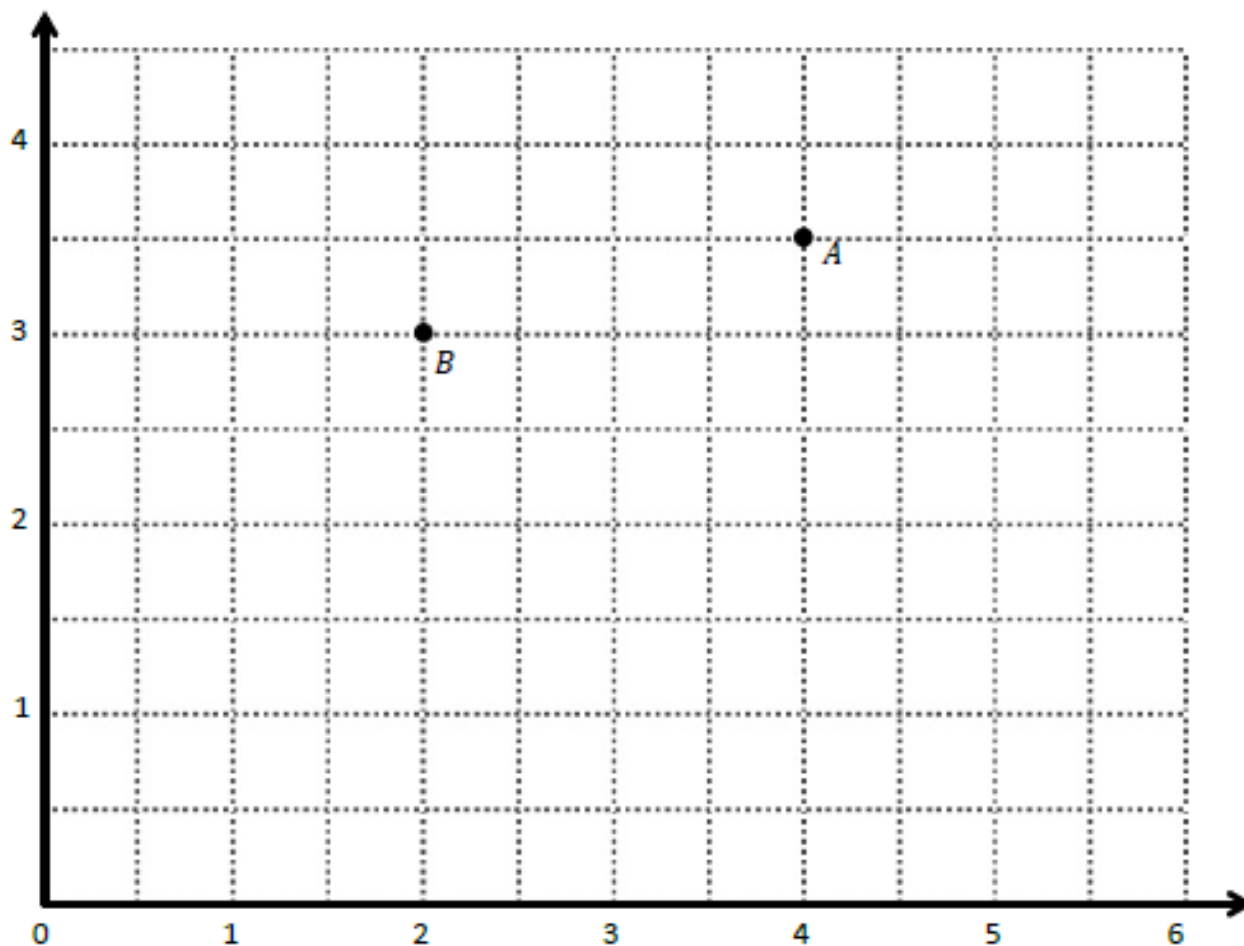
Name: _____ Week 36 Day 2 Date: _____

BCCS-Boys

Stanford MIT

Do Now

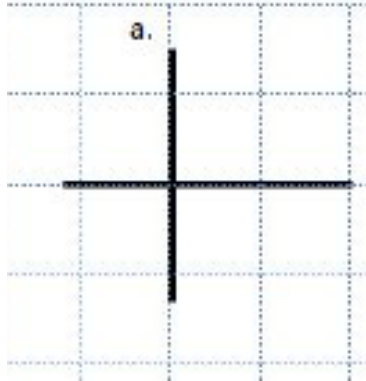
Use the coordinate plane below to complete the following tasks.



- Identify the locations of A and B . $A: (\underline{\quad}, \underline{\quad})$ $B: (\underline{\quad}, \underline{\quad})$
- Draw \overrightarrow{AB} .
- Generate coordinate pairs for C and D , such that $\overrightarrow{AB} \parallel \overrightarrow{CD}$.
 $C: (\underline{\quad}, \underline{\quad})$ $D: (\underline{\quad}, \underline{\quad})$
- Draw \overrightarrow{CD} .

Problem 1:

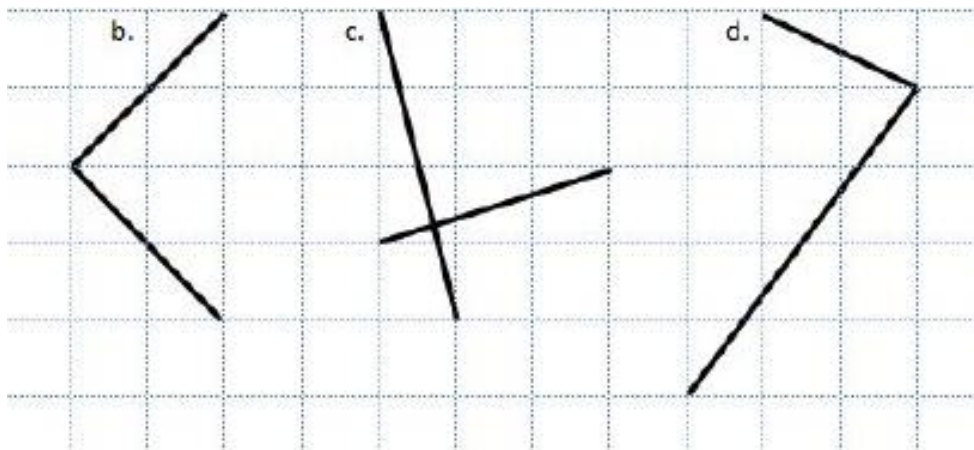
Identifying perpendicular lines



How do you know that a is showing perpendicular lines? _____

Problem 2:

Identifying perpendicular lines

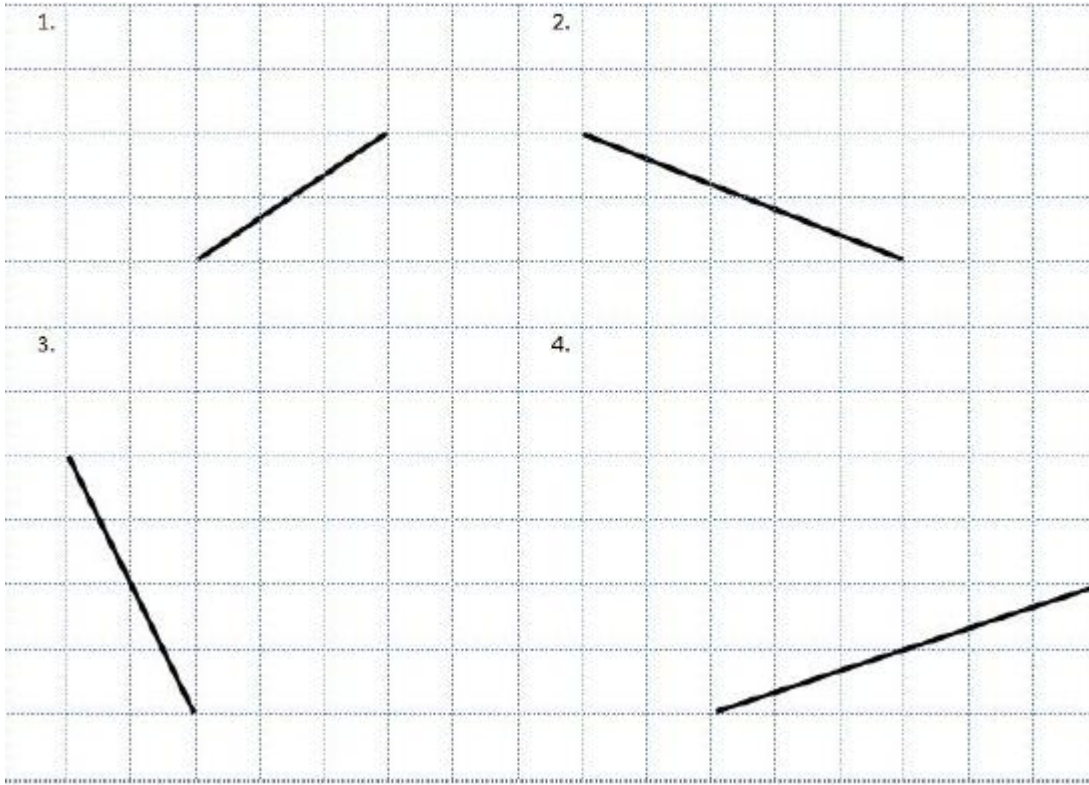


Circle the other lines that are perpendicular.

How do you know? _____

Problem 3:

Create Perpendicular Lines



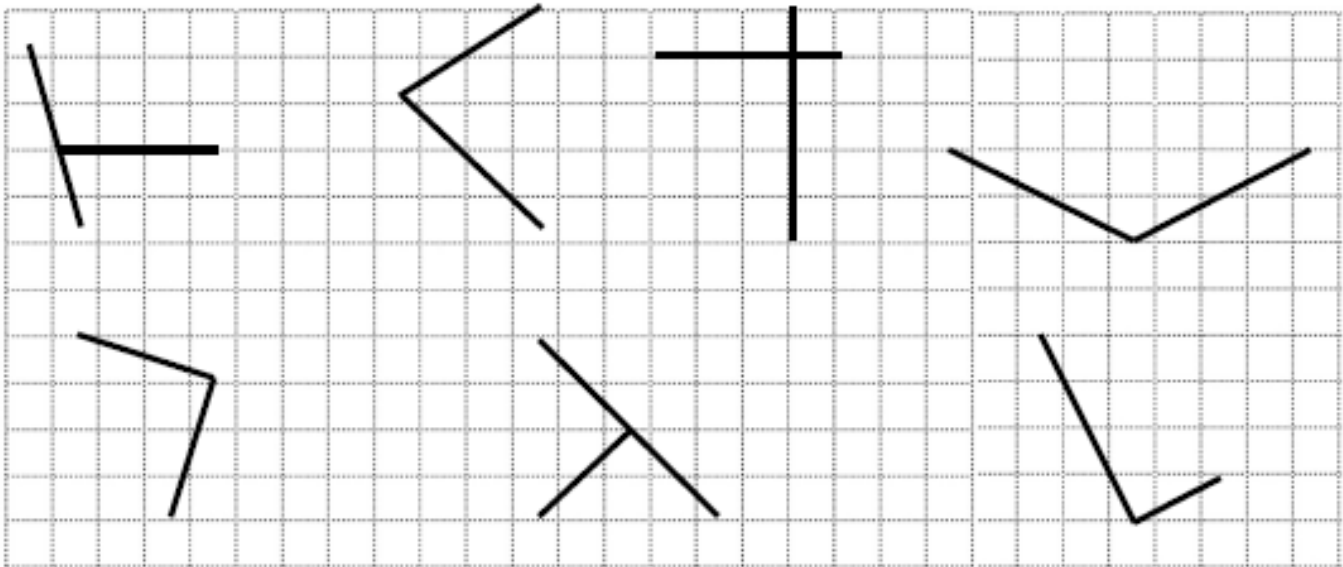
Problem 4:

Use a straightedge to draw at least 3 different sets of perpendicular lines in the space below.



Problem 5:

Circle the pairs of segments that are perpendicular.



Problem Set:

Draw a segment perpendicular to each given segment. Show your thinking by sketching triangles as needed.

a. b. c. d.

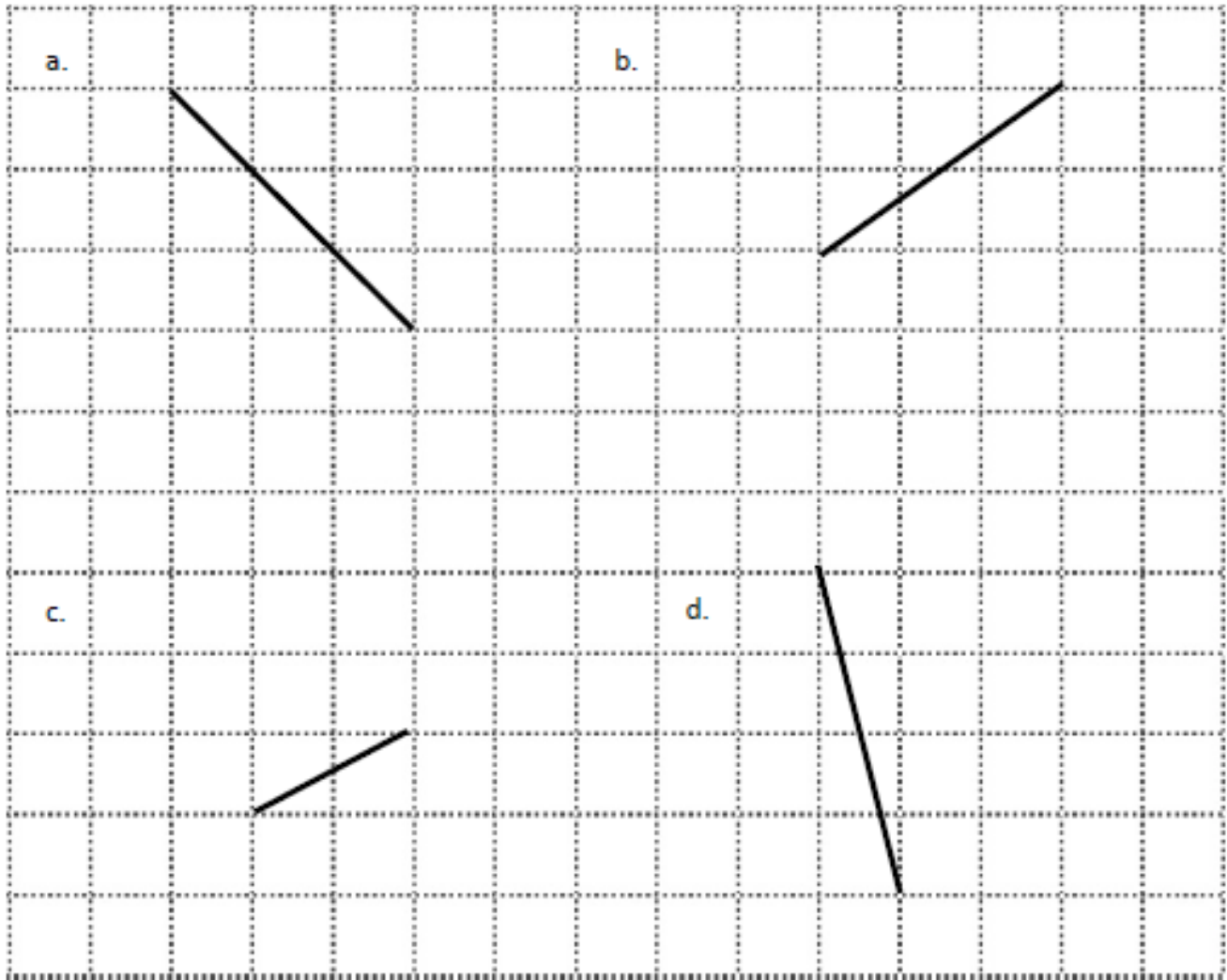
Application Problem:

Draw 2 different lines perpendicular to line e .

e

Exit Ticket:

Draw a segment perpendicular to each given segment. Show your thinking by sketching triangles as needed.

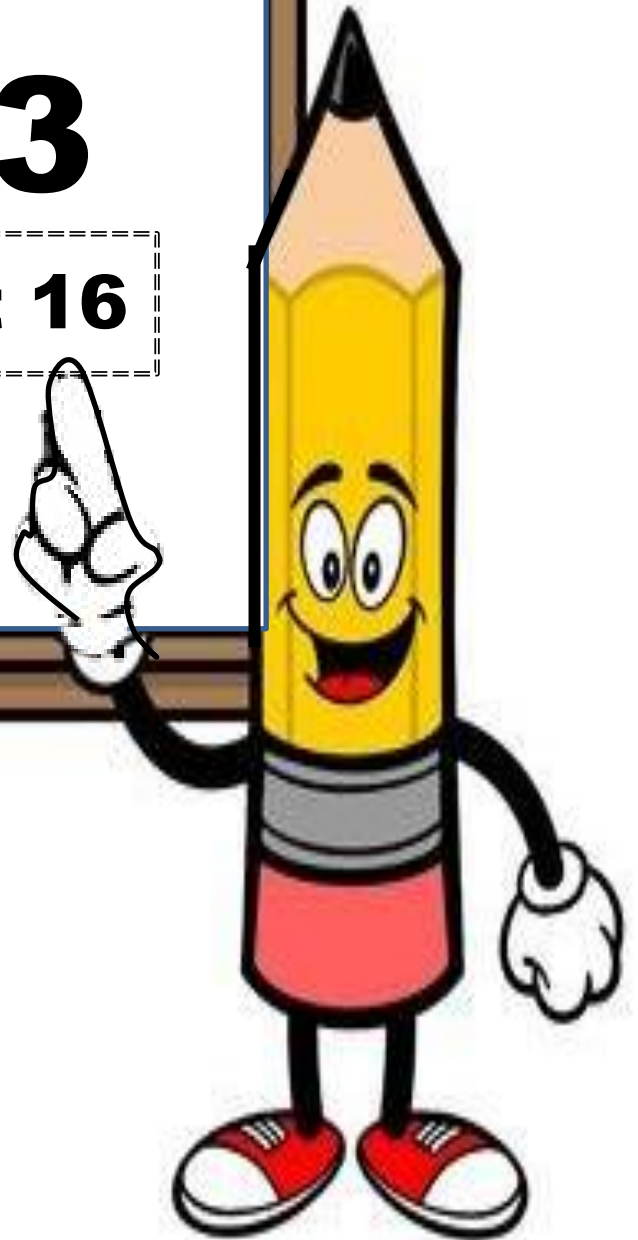




Brighter Choice
Charter School for Boys

Day # 3

Mod 6 Packet 16



Name: _____ Week 36 Day 3 Date: _____

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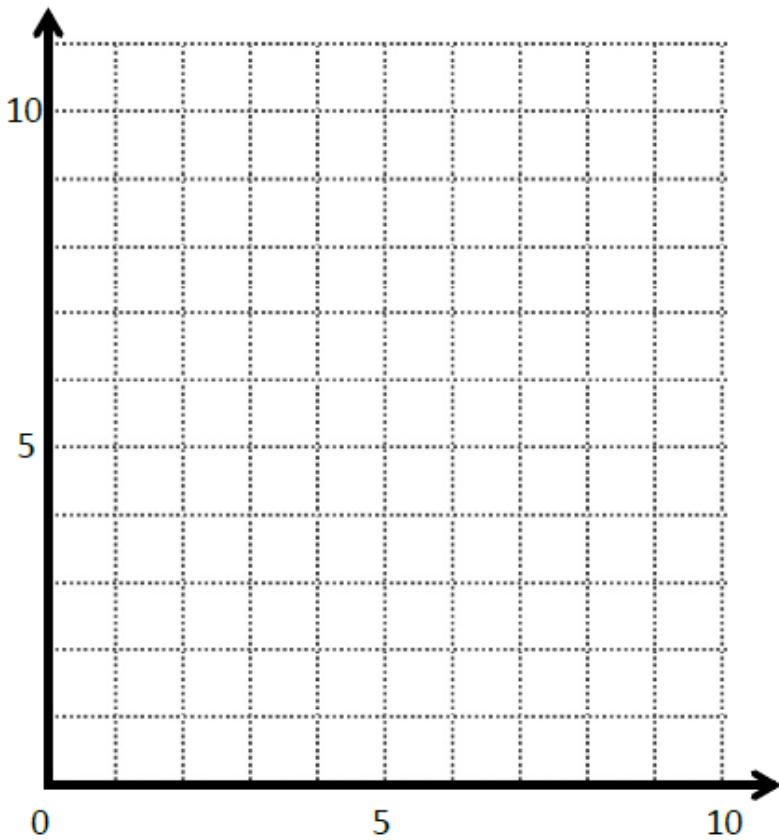
Do Now

Draw a segment perpendicular to each given segment. Show your thinking by sketching triangles as needed.

<p>a.</p>	<p>b.</p>
<p>c.</p>	<p>d.</p>

Draw 2 different lines perpendicular to line *b*.

Problem 1:

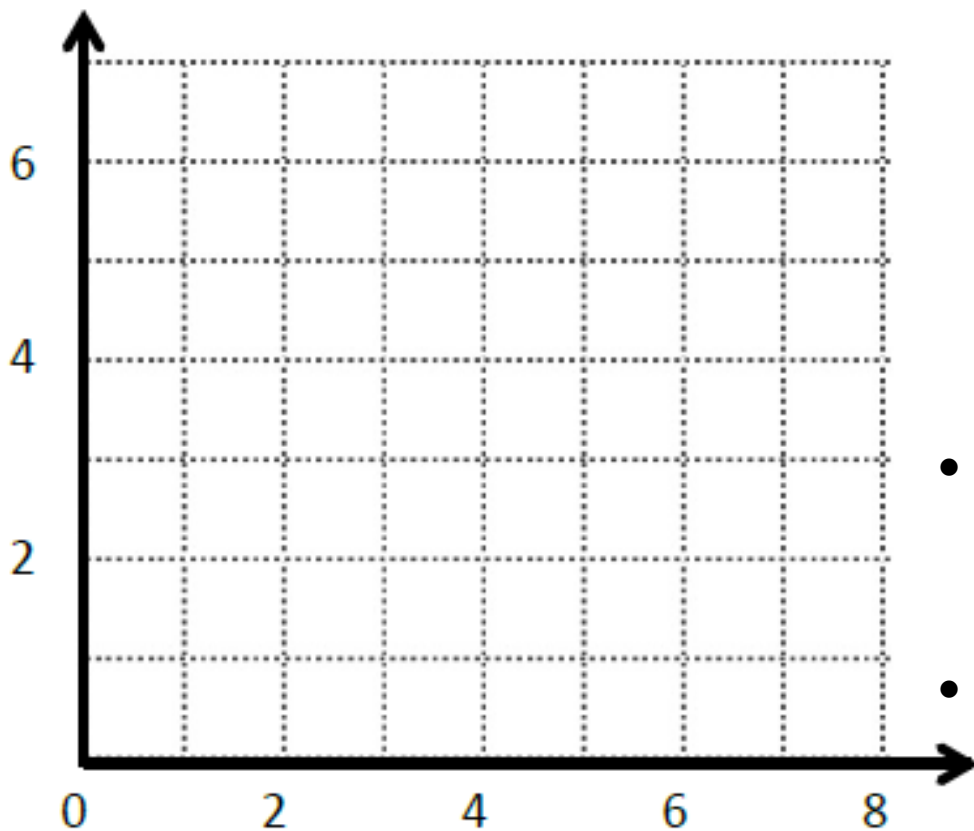


	(x, y)
<i>A</i>	
<i>B</i>	
<i>C</i>	

- Plot A at (3, 1) and plot B at (8, 3). Write the coordinates on the chart.
 - Draw a line to connect points A and B together.
-
- Explain the directions it takes to go from A to B.

 - Plot C using the same directions but going opposite from A.
 - What are the coordinates for C? (_____, _____). Write them in the chart.
 - Draw a line connecting point A to point C.
 - What can we say about \overline{AB} and \overline{AC} ? _____

Problem 2:



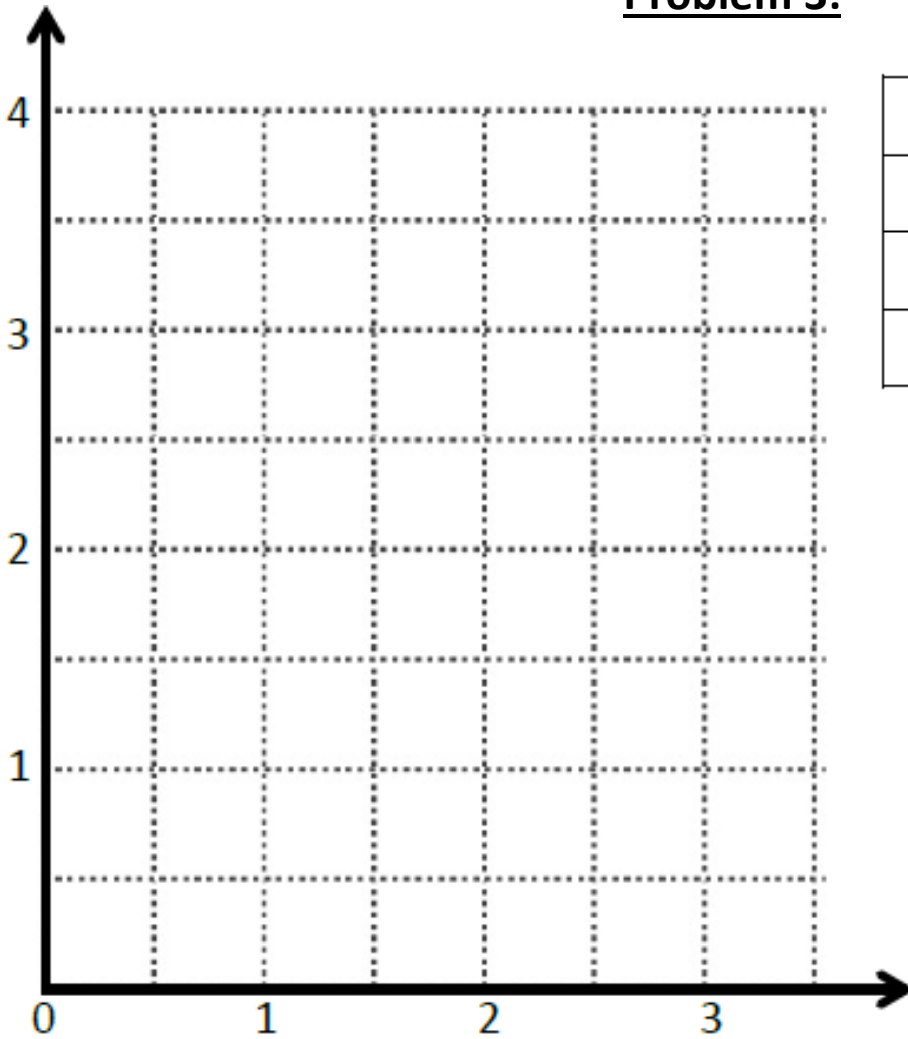
	(x, y)
D	
E	
F	

- Plot D at $(2, 3)$ and plot E at $(5, 2)$. Write the coordinates on the chart.
- Draw a line to connect points D and E together.

- Explain the directions it takes to go from D to E .

- Plot F using the same directions but going opposite from E .
- What are the coordinates for F ? (_____, _____). Write them in the chart.
- Draw a line connecting point E to point F .
- What can we say about \overline{DE} and \overline{EF} ? _____

Problem 3:



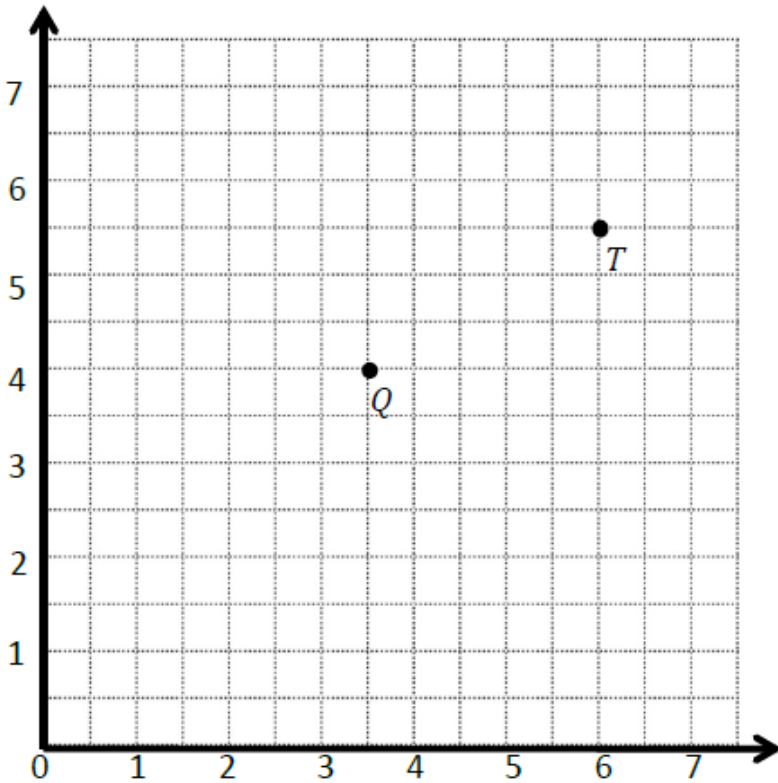
	(x, y)
G	
H	
I	

- Plot G at $(3, 2\frac{1}{2})$ and plot H at $(2, 1)$. Write the coordinates on the chart.
- Draw a line to connect points G and H together.

- Explain the directions it takes to go from G to H .

- Plot I using the same directions but going opposite from H .
- What are the coordinates for I ? (_____, _____). Write them in the chart.
- Draw a line connecting point H to point I .
- What can we say about \overline{HG} and \overline{IH} ? _____

Problem 4:



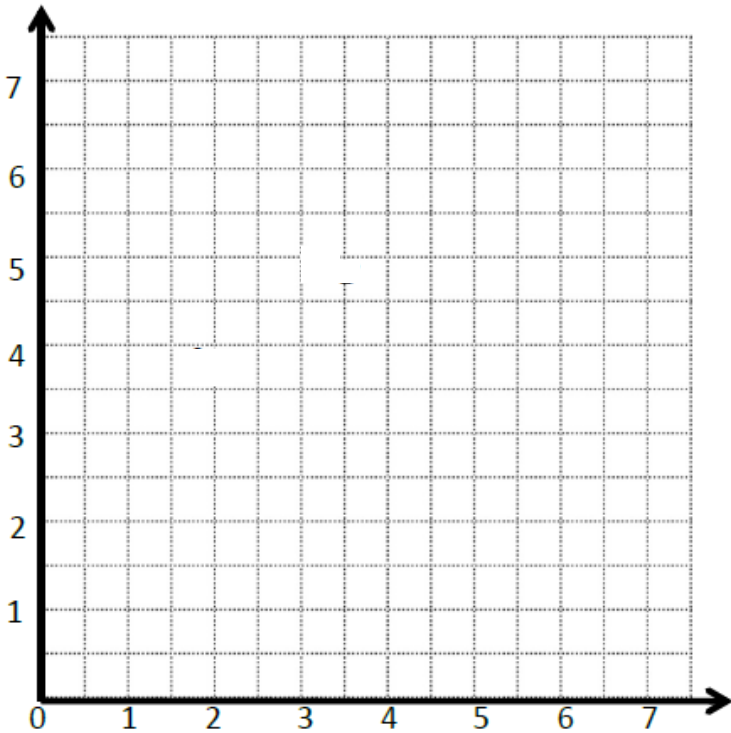
	(x, y)
Q	
T	
R	

- Write the coordinates of Q and T on the chart.
- Draw a line to connect points Q and T together.

- Explain the directions it takes to go from Q to T.

- Plot R using the same directions but going opposite from Q.
- What are the coordinates for R? (____, ____). Write them in the chart.
- Draw a line connecting point Q to point R.
- What can we say about \overline{QR} and \overline{QT} ? _____
- EF contains the following points. $E: (4, 1)$ $F: (3, \frac{1}{2})$
- Give the coordinates of point H , such that $EF \perp EH$.
H: (____, ____)

Problem Set:



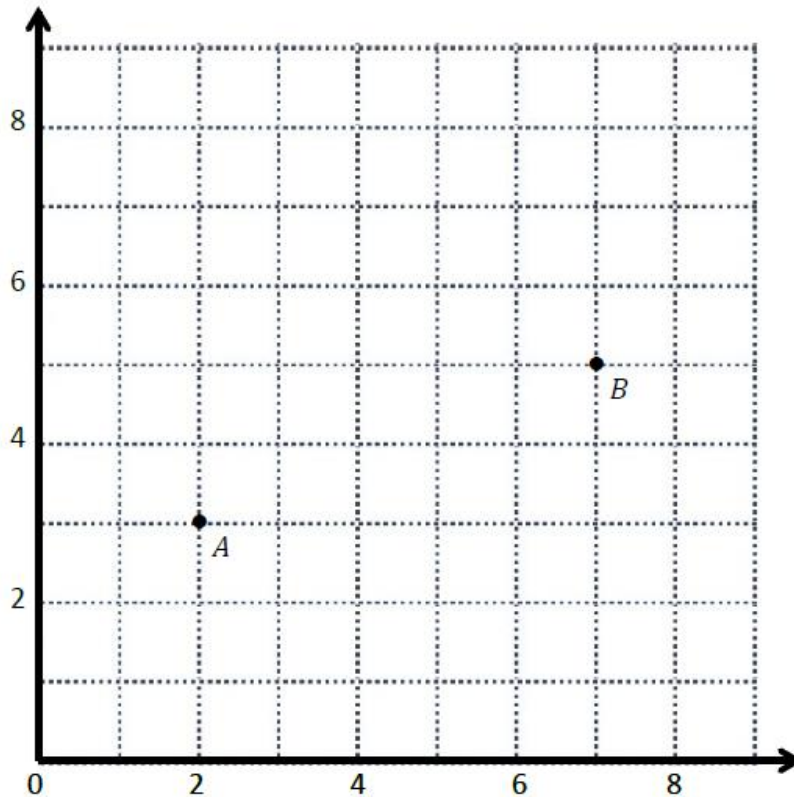
	(x, y)
B	
C	
D	

- Plot B at $(5, 2)$ and plot C at $(2\frac{1}{2}, 1)$. Write the coordinates on the chart.
- Draw a line to connect points B and C together.

- Explain the directions it takes to go from B to C.

- Plot D using the same directions but going opposite from C.
- What are the coordinates for D? (_____, _____). Write them in the chart.
- Draw a line connecting point C to point D.
- What can we say about \overline{CD} and \overline{BC} ? _____
- ST contains the following points. S: $(2, 3)$ T: $(3, 4\frac{1}{2})$
- Give the coordinate of point U, such that $ST \perp SU$.
U: (_____, _____)

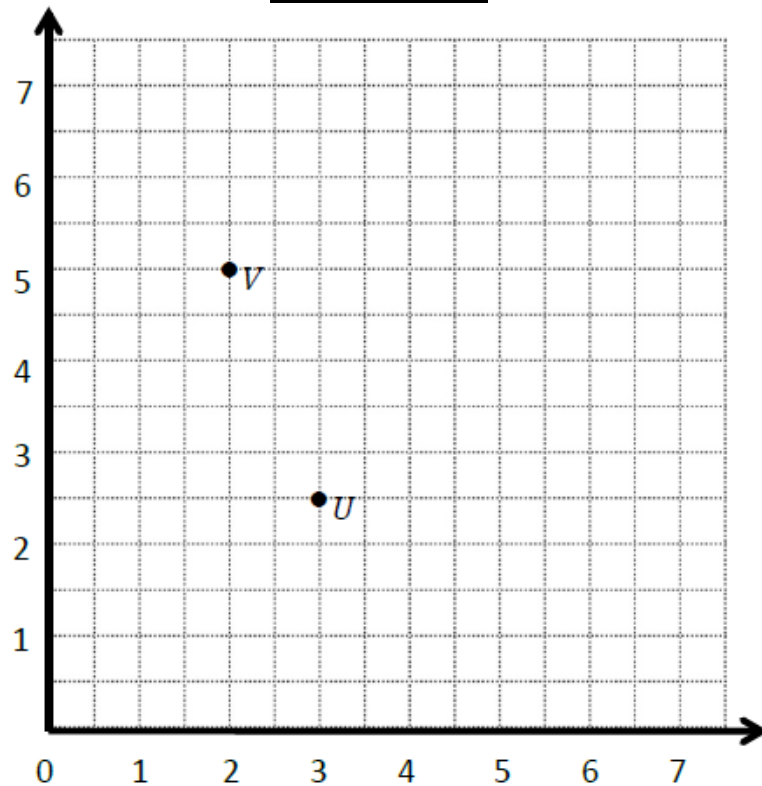
Application Problem:



- What is the location of A (____, ____) and B (____, ____)
- Draw AB .
- Plot point C .
- What is location of C ? (____, ____)
- Explain how you know where to plot point C

- Draw AC .
- Compare: AC ____ AB

Exit Ticket:



- What is the location of U (____, ____) and V (____, ____)
- Draw UV.
- Plot point W.
- What is location of W? (____, ____)
- Explain how you know where to plot point W

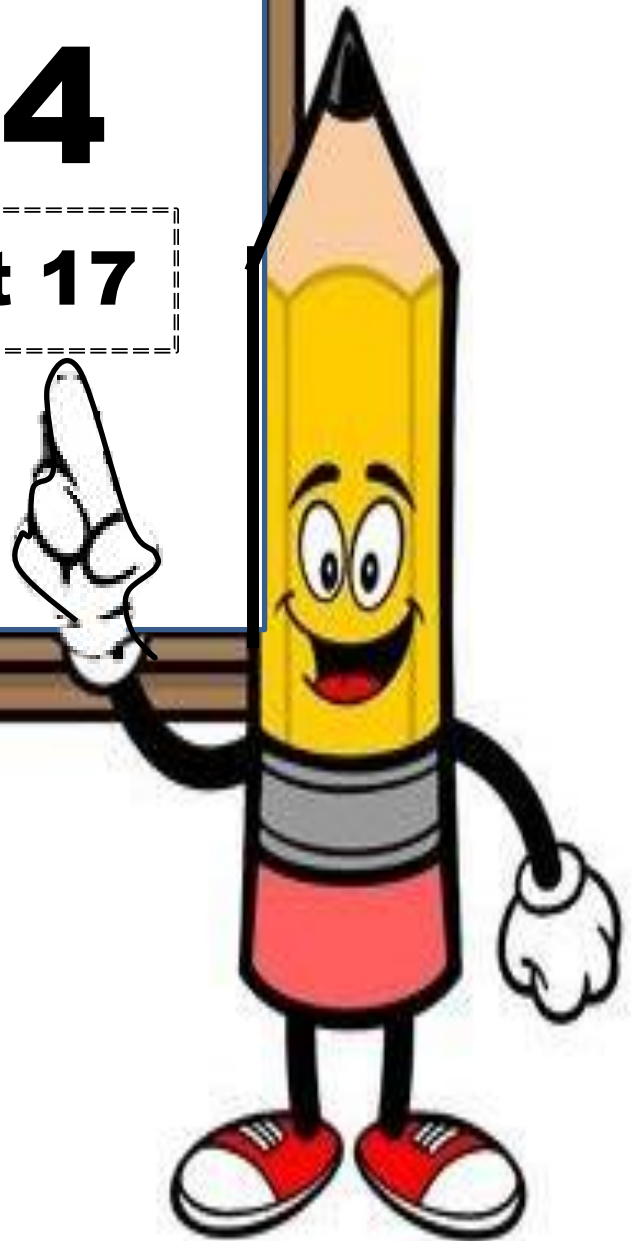
- Draw UW.
- Compare: UV _____ UW



Brighter Choice
Charter School for Boys

Day # 4

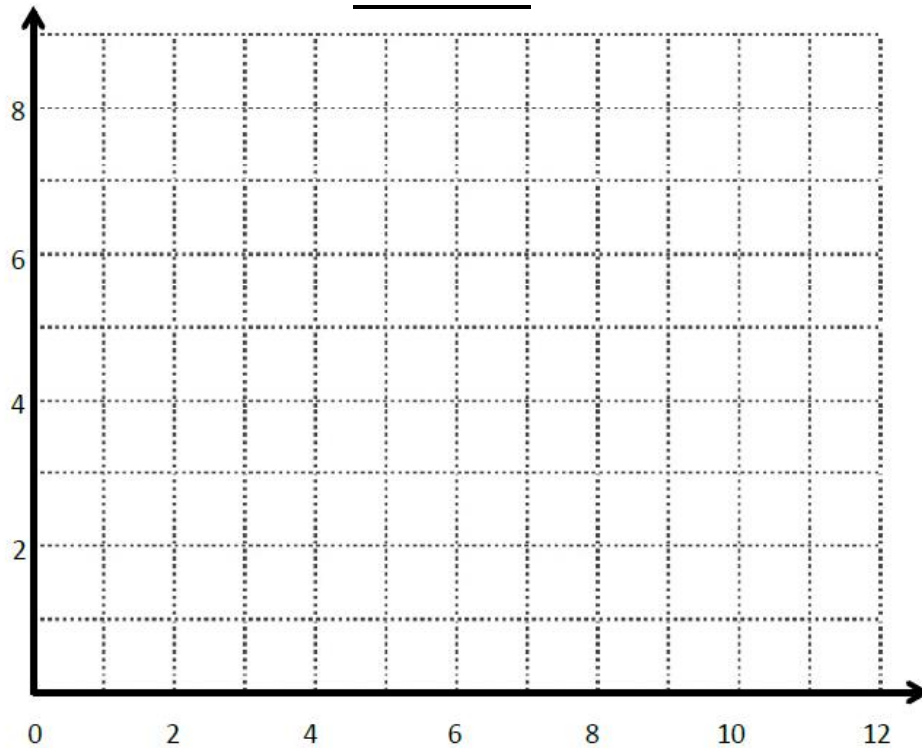
Mod 6 Packet 17



Name: _____ Week 36 Day 4 Date: _____

BCCS-Boys

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Do Now

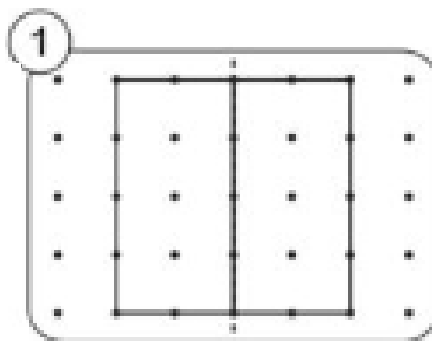
1. Plot $(10, 8)$ and $(3, 3)$ on the coordinate plane, connect the points with a straightedge, and label them as C and D .
2. Draw a segment parallel to CD .
3. Draw a segment perpendicular to CD .

Key Terms

Symmetry - when an _____ looks the exact _____ on one _____ as the other

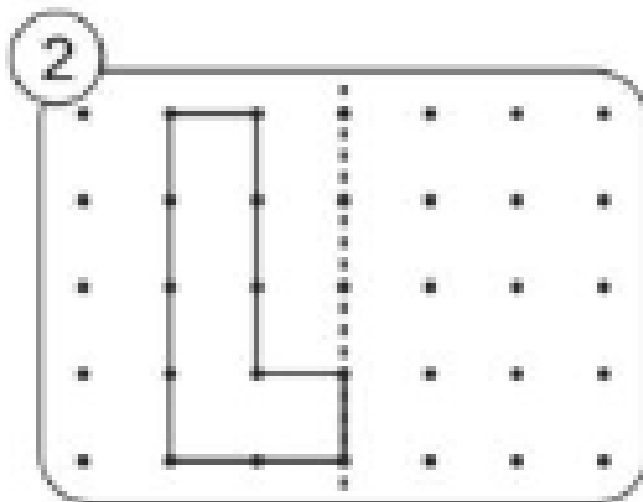
Line of Symmetry – a _____ that _____ a shape exactly in _____

Ex:

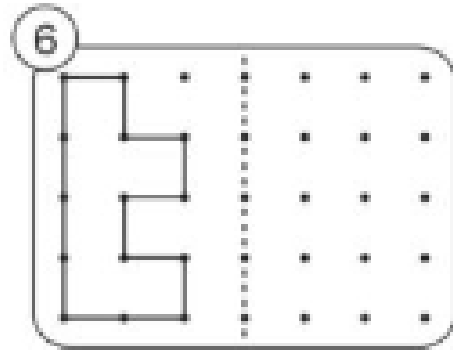
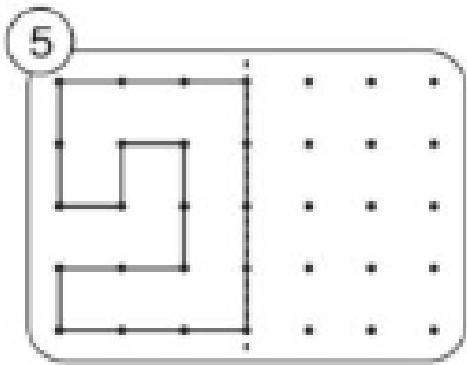
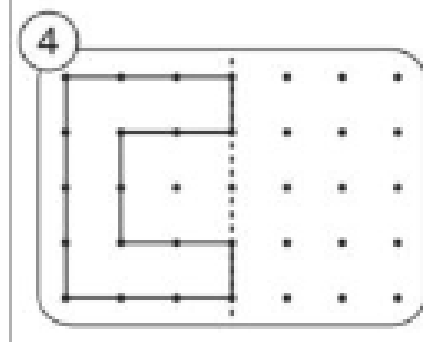
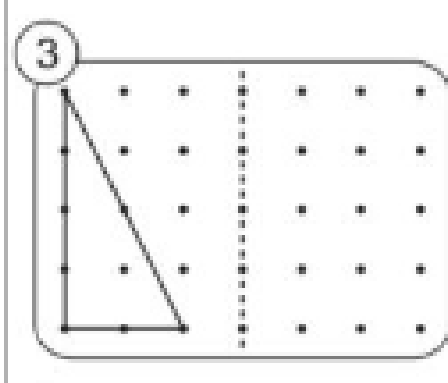


Input Activity

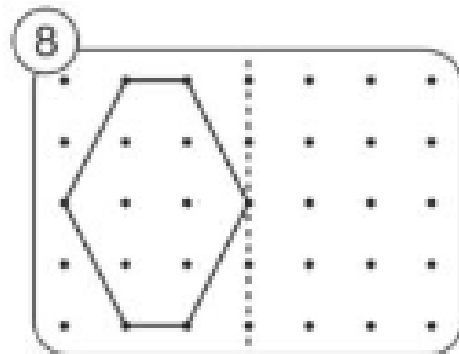
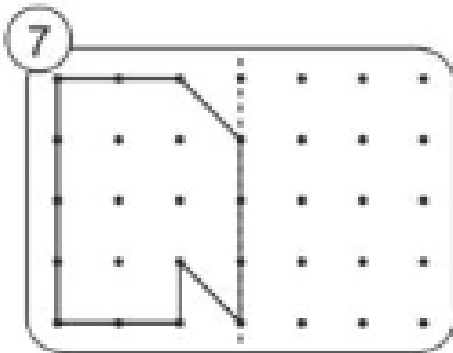
Problem 1



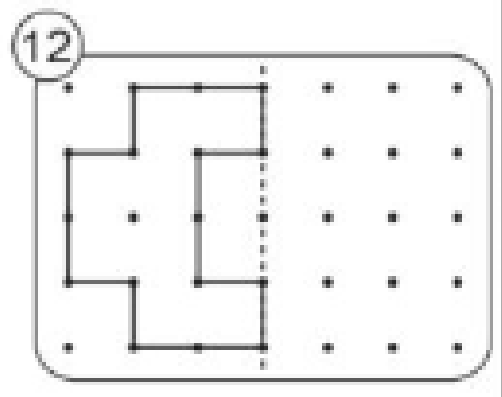
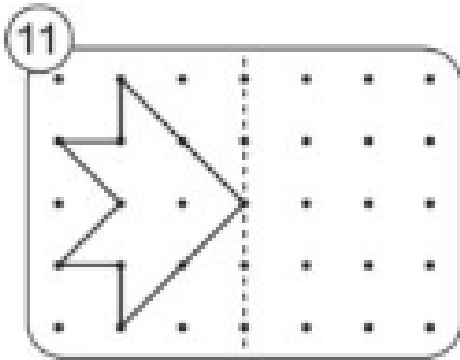
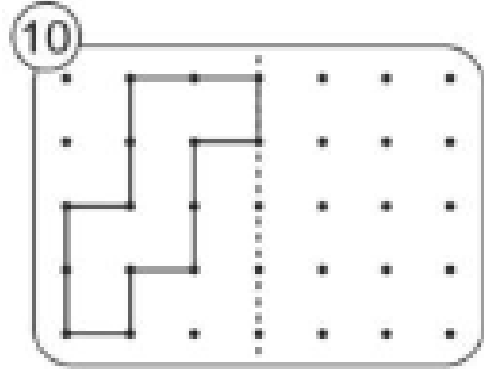
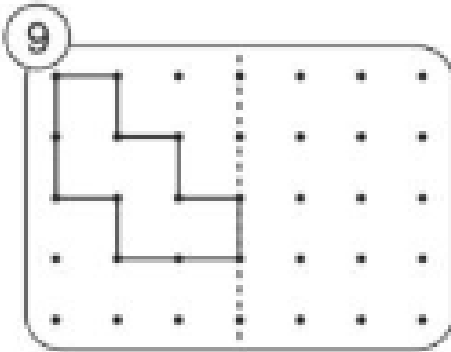
Problem 2:



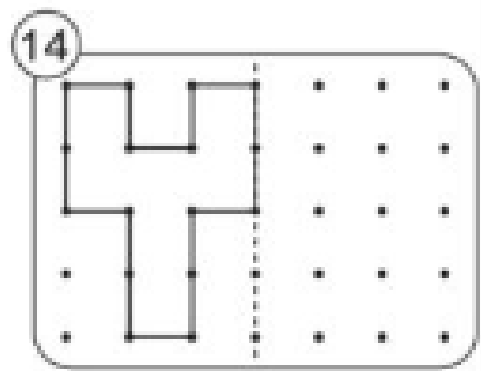
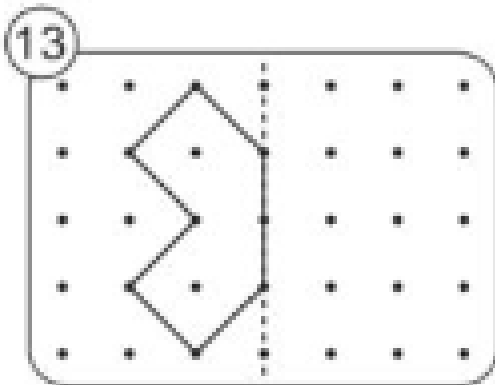
Problem 3:



Problem 4:

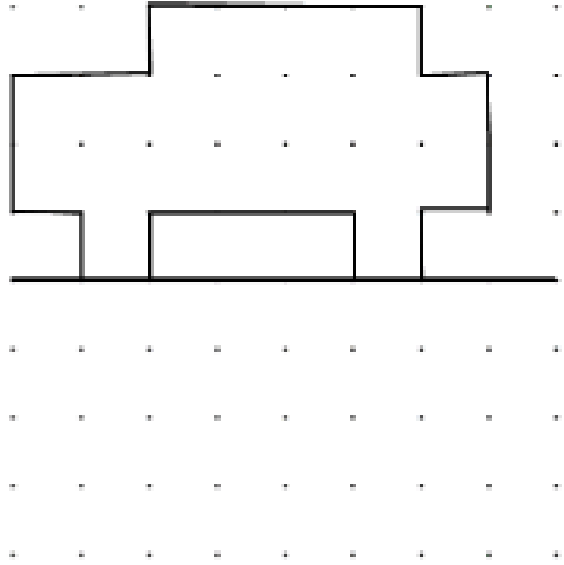
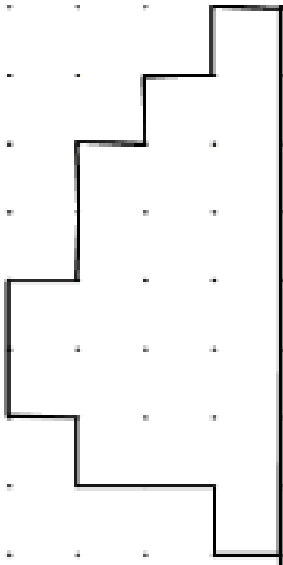


Problem 5:



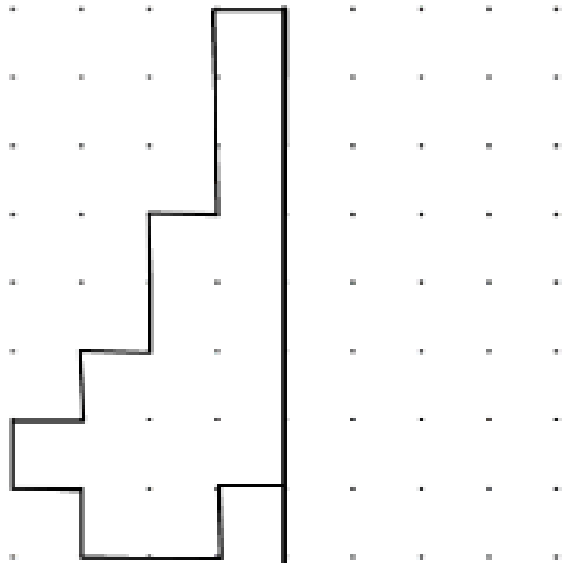
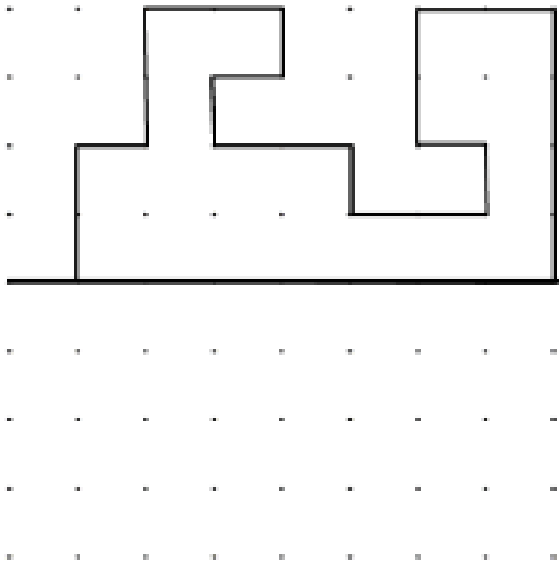
Problem Set:

Complete the missing half of each of the shapes using the mirror lines.



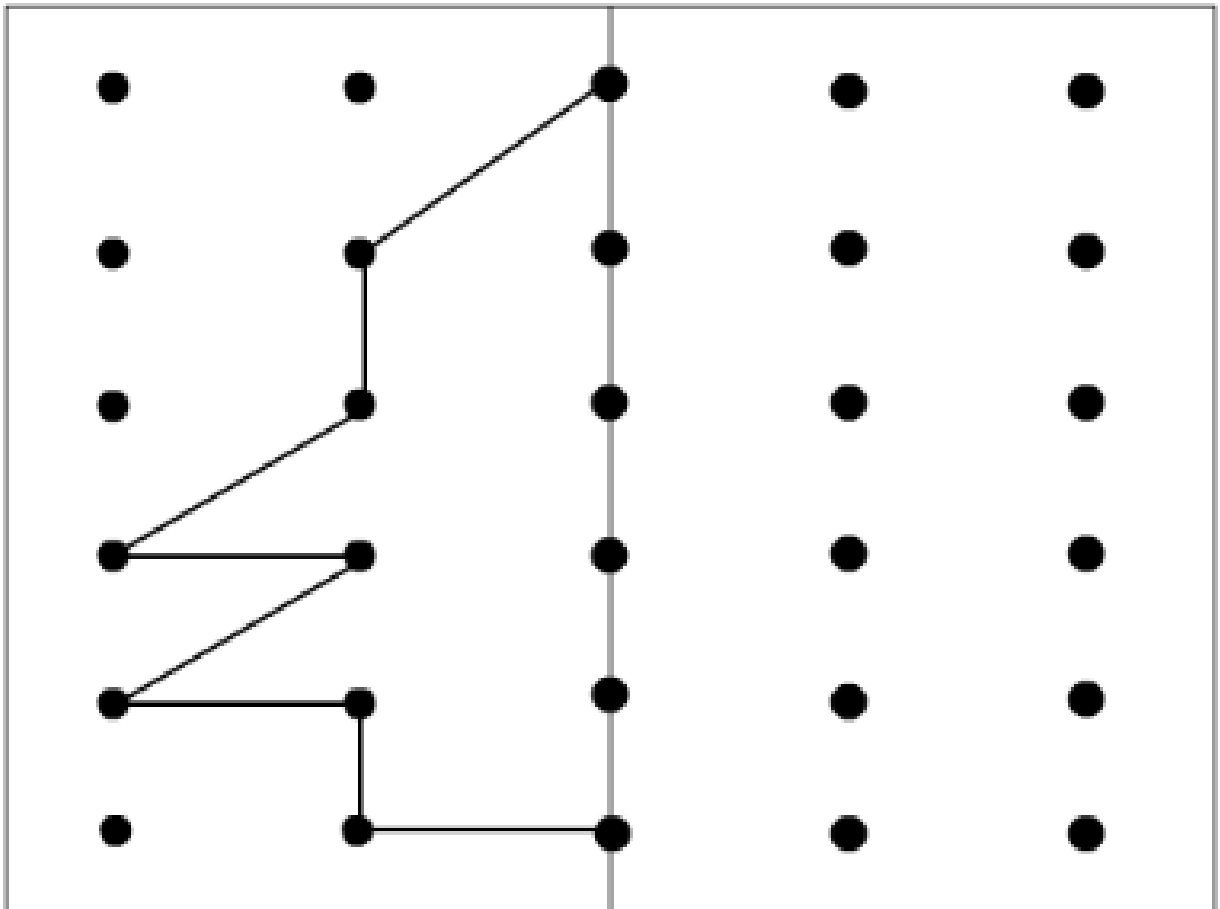
Application Problem

Complete the missing half of each of the shapes using the mirror lines.



Exit Ticket:

Complete the missing pattern.

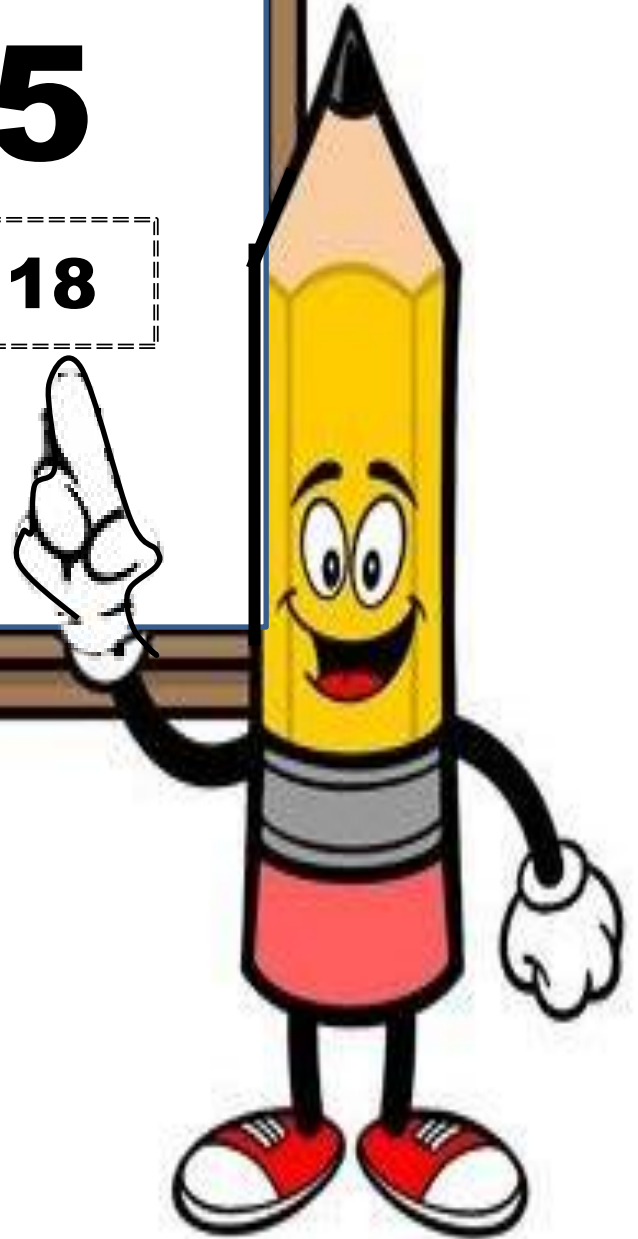




Brighter Choice
Charter School for Boys

Day # 5

Mod 6 Packet 18



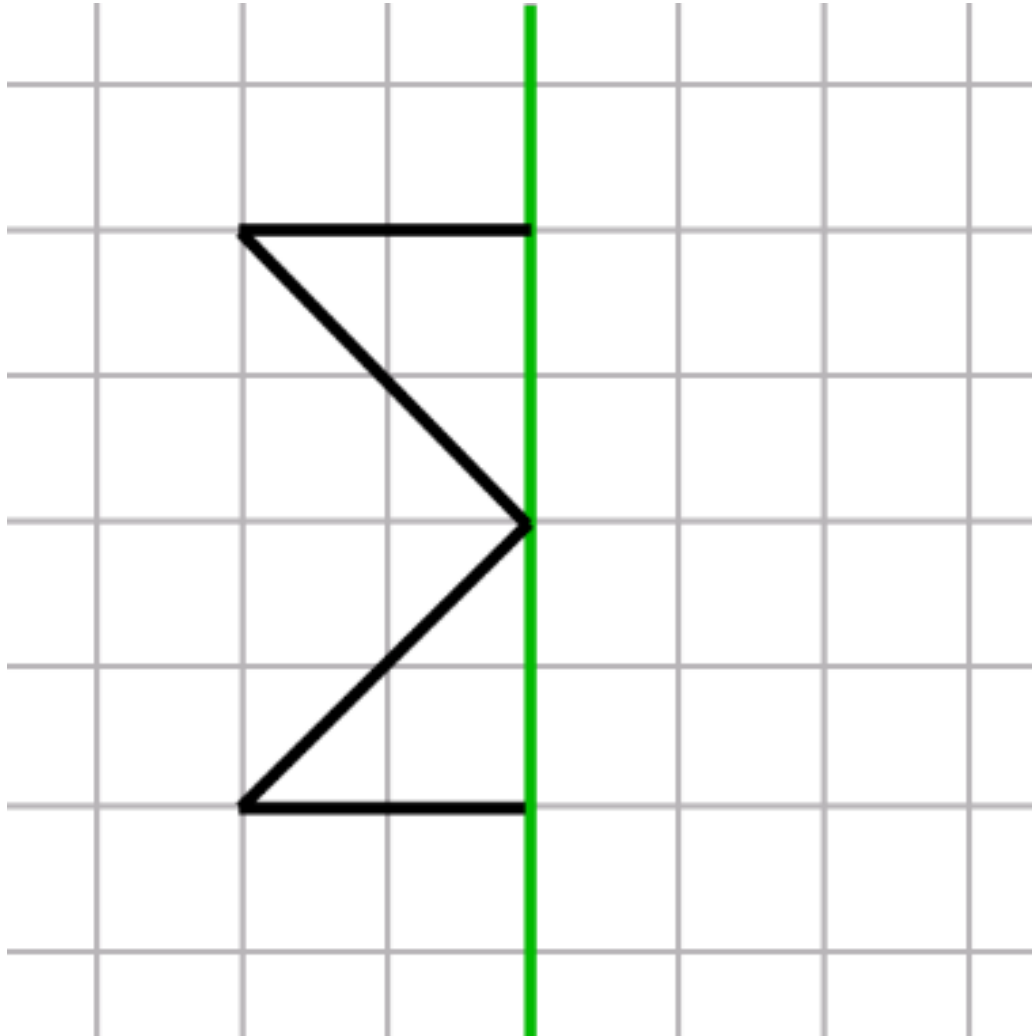
Name: _____ Week 36 Day 5 Date: _____

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Do Now

Complete the symmetry on the following grid.



Input Activity

Problem 1:

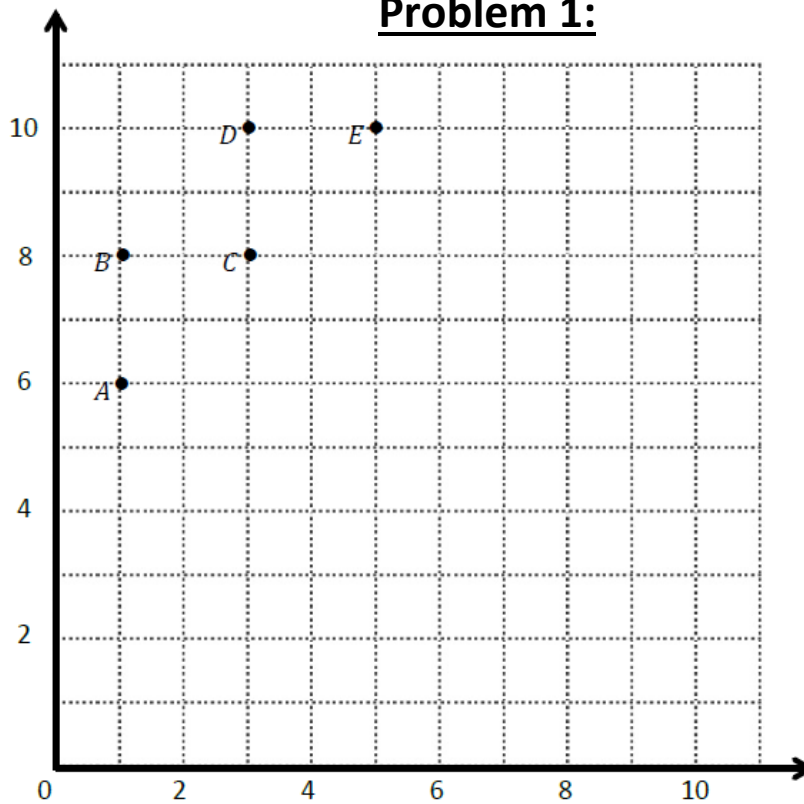


Table A

Point	(x, y)
A	
B	
C	
D	
E	

Table B

Point	(x, y)
I	
H	
G	
F	

1. Record the coordinates of points A through E in Table A.
2. Use your ruler to connect these points in alphabetical order.
3. Use your ruler to construct a line of symmetry, labeled L, whose rule is ***x is always 5***.
4. Let's make a reflective symmetric shape to the right of the line.
5. Fill out Table B.
6. Use your ruler to connect points I-F in alphabetical order.

Problem 2:

1. Let's create a new line of symmetry. Use your ruler to construct a horizontal line, labeled M, whose rule is **y is always 6**.
2. Let's complete the drawing and create a figure that is symmetric about line M.
3. Plot and record the coordinates of each symmetric point in Tables C and D.
4. Use your ruler to connect the points you plotted to draw the symmetric figure.
5. Compare the coordinates in Tables A and B with their symmetric point in Tables C and D. What do you notice about points when they are symmetric about a horizontal line?

Table C

(x, y)

Table D

(x, y)

Problem 3:

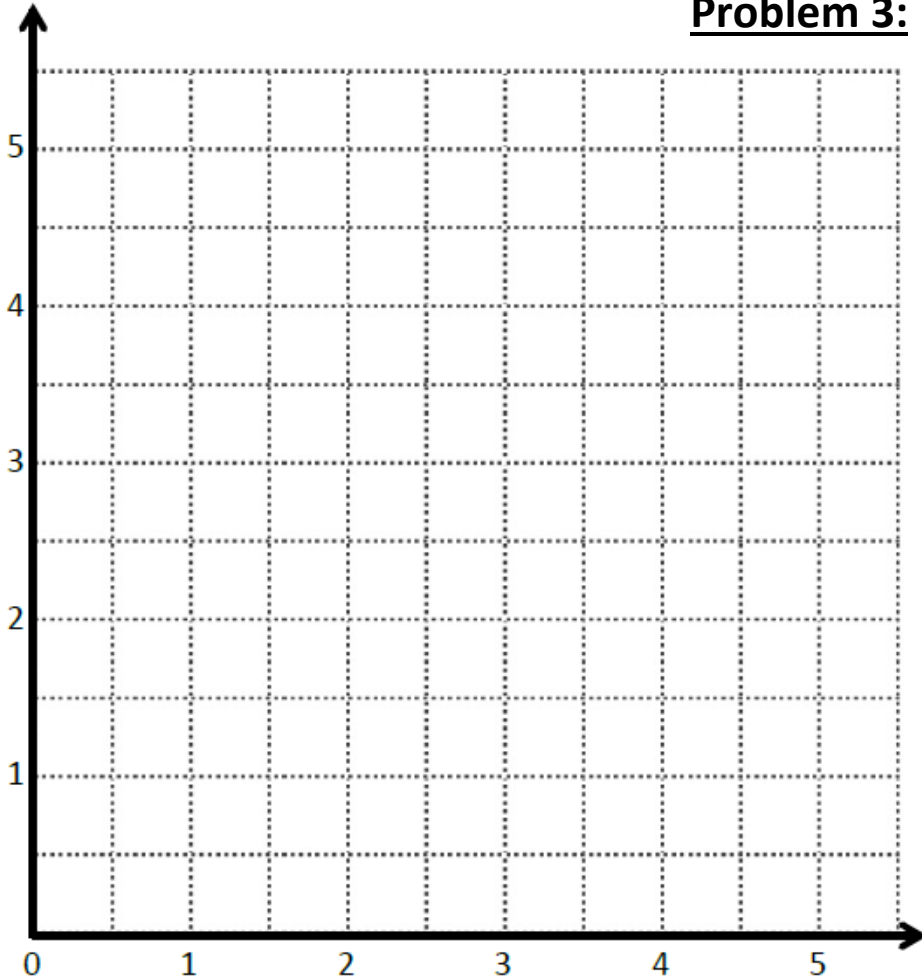


Table E

Point	(x, y)
<i>A</i>	$(1, 1)$
<i>B</i>	$(1\frac{1}{2}, 3\frac{1}{2})$
<i>C</i>	$(2, 3)$
<i>D</i>	$(2\frac{1}{2}, 3\frac{1}{2})$
<i>E</i>	$(2\frac{1}{2}, 2\frac{1}{2})$
<i>F</i>	$(3\frac{1}{2}, 2\frac{1}{2})$
<i>G</i>	$(3, 2)$
<i>H</i>	$(3\frac{1}{2}, 1\frac{1}{2})$

1. Plot the coordinate pairs in Table E.
2. Use your ruler to connect the points in alphabetical order.
Then connect H to A.
3. Is this figure symmetrical? _____
4. Where? _____
5. Draw the symmetrical line and label it N.

Problem 4:

Use the plane below to complete the following tasks.

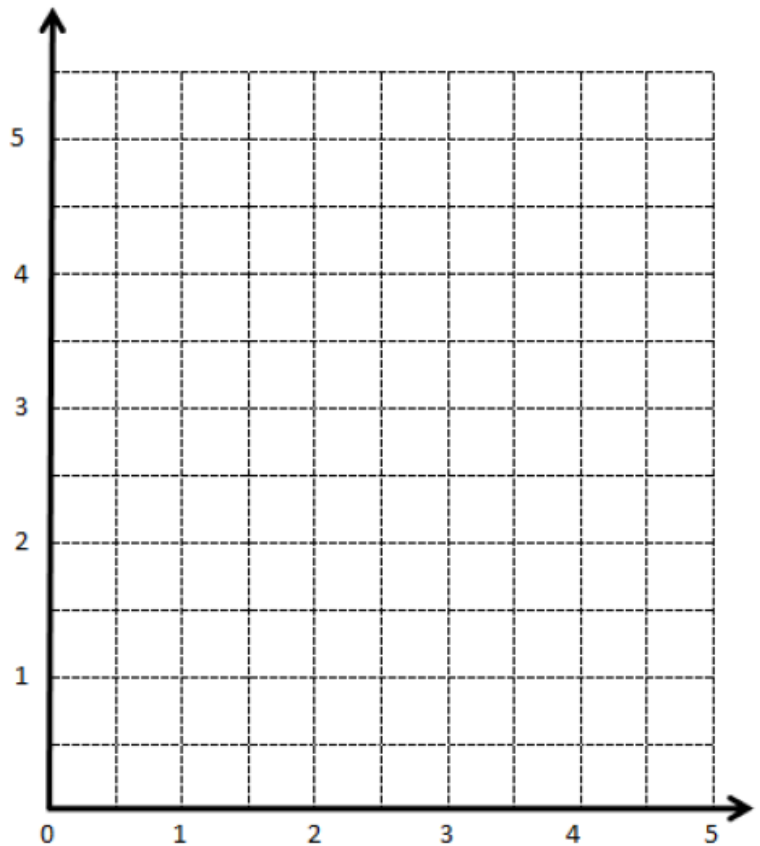
- Draw a line u whose rule is y is equal to $1\frac{1}{2}$
- Construct a figure with a total of 6 points, all on the same side of the line.
- Record the coordinates of each point, in the order in which they were drawn, in Table A.

Table A

(x, y)

Table B

(x, y)



Complete the drawing to create a figure that is symmetric about u . For each point in Table A, record the corresponding point on the other side of the line of symmetry in Table B.

Problem Set:

Use the plane to the right to complete the following tasks.

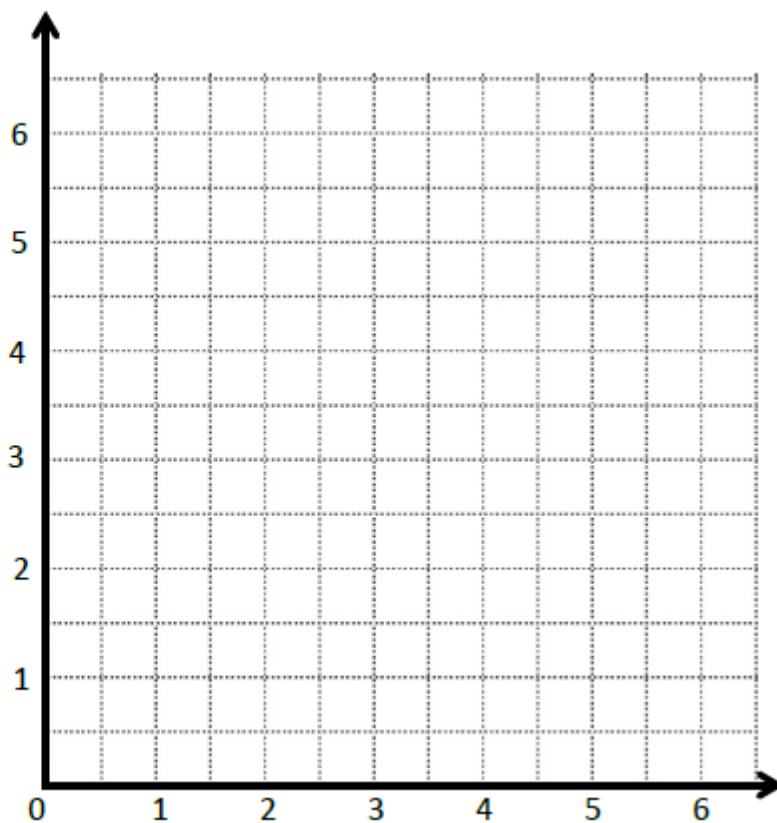
- Draw a line p whose rule is, x is equal to y .
- Plot the points from Table A on the grid in order. Then, draw line segments to connect the points.

Table A

(x, y)
$(\frac{1}{2}, \frac{1}{2})$
$(1, 2)$
$(1\frac{1}{2}, 1\frac{1}{2})$
$(2, 4)$
$(3\frac{1}{2}, 3\frac{1}{2})$
$(4, 4\frac{1}{2})$
$(5, 5)$

Table B

(x, y)



Complete the drawing to create a figure that is symmetric about line p . For each point in Table A, record the symmetric point on the other side of the line p in Table B.

d. Compare the y -coordinates in Table A with those in Table B. What do you notice? _____

e. Compare the x -coordinates in Table A with those in Table B. What do you notice? _____

Application Problem:

1. Use the plane to the right to complete the following tasks.

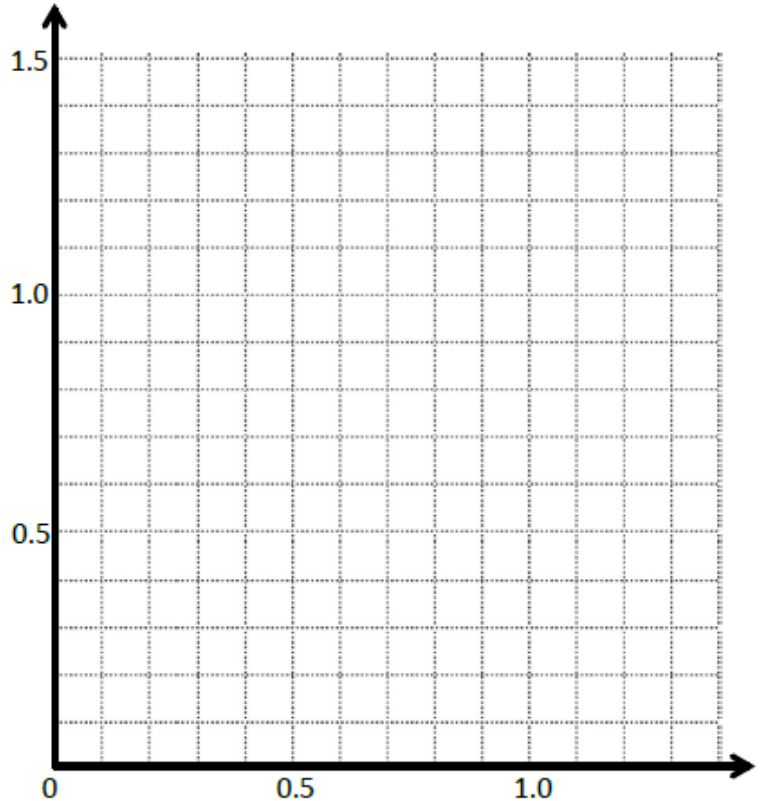
- a. Draw a line t whose rule is y is always 0.7 .
- b. Plot the points from Table A on the grid in order. Then, draw line segments to connect the points.

Table A

(x, y)
(0.1, 0.5)
(0.2, 0.3)
(0.3, 0.5)
(0.5, 0.1)
(0.6, 0.2)
(0.8, 0.2)
(0.9, 0.1)
(1.1, 0.5)
(1.2, 0.3)
(1.3, 0.5)

Table B

(x, y)



Complete the drawing to create a figure that is symmetric about line t . For each point in Table A, record the corresponding point on the other side of the line of symmetry in Table B.

d. Compare the y -coordinates in Table A with those in Table B. What do you notice? _____

e. Compare the x -coordinates in Table A with those in Table B. What do you notice? _____

2. This figure has a second line of symmetry. Draw the line on the plane, and write the rule for this line. _____

Exit Ticket:

Kenny plotted the following pairs of points and said they made a symmetric figure about a line with the rule:

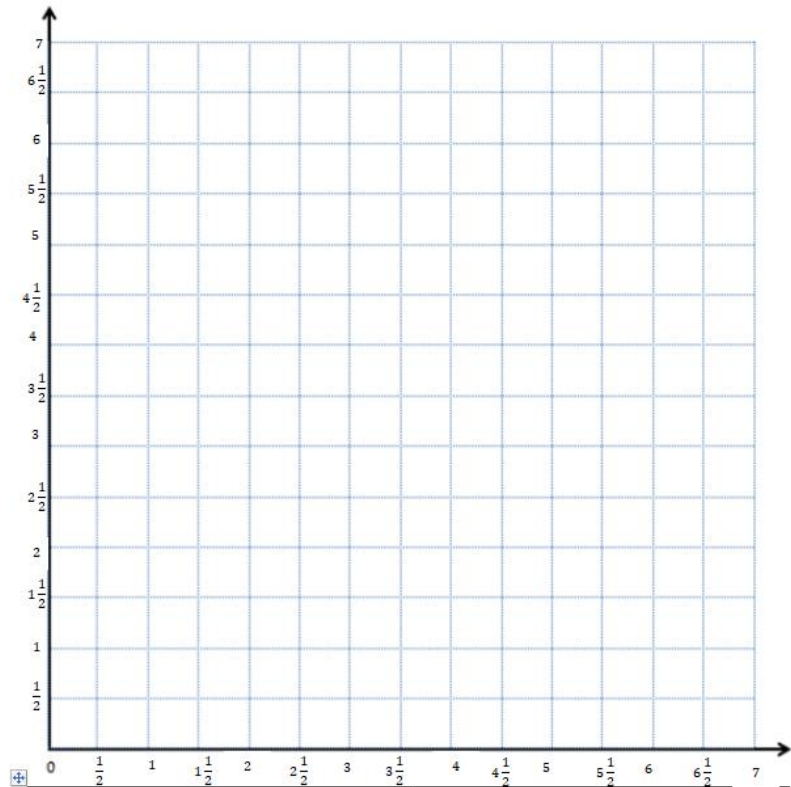
y is always 4

(3, 2) and (3, 6)

(4, 3) and (5, 5)

(5, 1) and (5, 7)

(7, $1\frac{1}{2}$) and (7, $6\frac{1}{2}$)



Is his figure symmetrical about the line? _____

How do you know? _____