

Are you ready to **ZEARN?**

Mission 4

Construct Lines, Angles, and Shapes

Name: _____

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Fourth Edition

Name: _____

Weekly Goal Tracker

Week of:	My goal is to earn badges for lessons: _____	Teacher Signature:
Week of:	My goal is to earn badges for lessons: _____	Teacher Signature:
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Week of:	My goal is to earn badges for lessons: _____	Teacher Signature:

Name: _____

Mission 4: Workbook Checklist

1. Points, Lines, and Rays! Oh My!	Date: _____	Teacher Signature: _____
Math Chat:	<input type="radio"/> Notes	<input type="radio"/> Exit Ticket
2. All Right with Me	Date: _____	Teacher Signature: _____
Learning Lab:		<input type="radio"/> Exit Ticket
3. Two Lines Make a Right	Date: _____	Teacher Signature: _____
Math Chat:	<input type="radio"/> Notes	<input type="radio"/> Exit Ticket
4. Can't Touch This!	Date: _____	Teacher Signature: _____
Math Chat:	<input type="radio"/> Notes	<input type="radio"/> Exit Ticket
5. Circle Up	Date: _____	Teacher Signature: _____
Learning Lab:		<input type="radio"/> Exit Ticket
6. To a Degree	Date: _____	Teacher Signature: _____
Math Chat:	<input type="radio"/> Notes	<input type="radio"/> Exit Ticket
7. Make and Measure	Date: _____	Teacher Signature: _____
Math Chat:	<input type="radio"/> Notes	<input type="radio"/> Exit Ticket
8. Turn, Turn, Turn	Date: _____	Teacher Signature: _____
Math Chat:	<input type="radio"/> Notes	<input type="radio"/> Exit Ticket
9. Sum Angles	Date: _____	Teacher Signature: _____
Learning Lab:		<input type="radio"/> Exit Ticket
10. The Great Angle Mystery	Date: _____	Teacher Signature: _____
Math Chat:	<input type="radio"/> Notes	<input type="radio"/> Exit Ticket

12. So Symmetrical

Date:_____ Teacher Signature:_____

Math Chat: **Notes** **Exit Ticket**

13. Name That Triangle

Date:_____ Teacher Signature:_____

Math Chat: **Notes** **Exit Ticket**

14. What's Your Angle?

Date:_____ Teacher Signature:_____

Learning Lab: **Exit Ticket**

15. Four Sides - Four Angles

Date:_____ Teacher Signature:_____

Math Chat: **Notes** **Exit Ticket**

Lesson 1
G:4 M:4

Points, Lines, and Rays! Oh My!

ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

Class: _____

1 Plot and connect points to draw \overline{AB} , \overleftrightarrow{AC} , \overrightarrow{BD} , \overrightarrow{BE} .

Line segments have _____ endpoints. _____

A line extends in _____ directions without an end. _____

A ray has _____ and goes on forever in one direction. _____

Any _____ sharing the same endpoint create an angle. _____



EXTRA WORKSPACE



Lesson 1
G:4 M:4

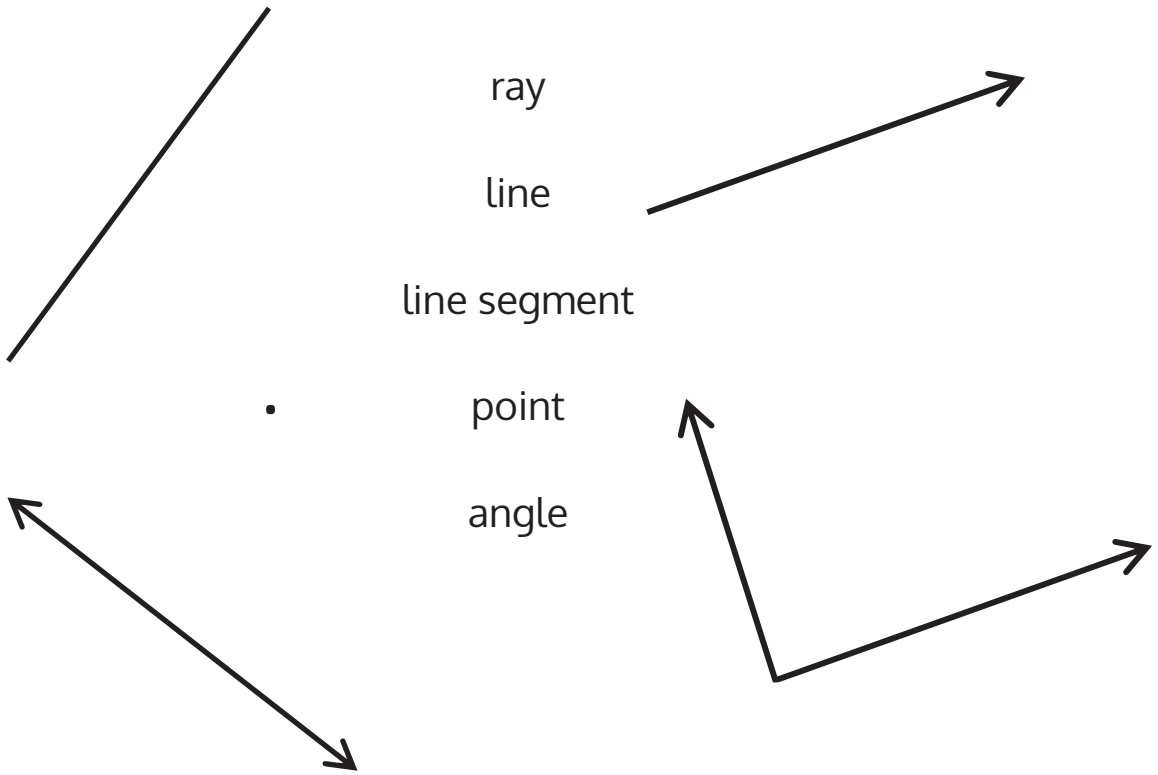
EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. Draw a line segment to connect the word to its picture.



2. How is a line different from a line segment?



Lesson 2
G:4 M:4

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

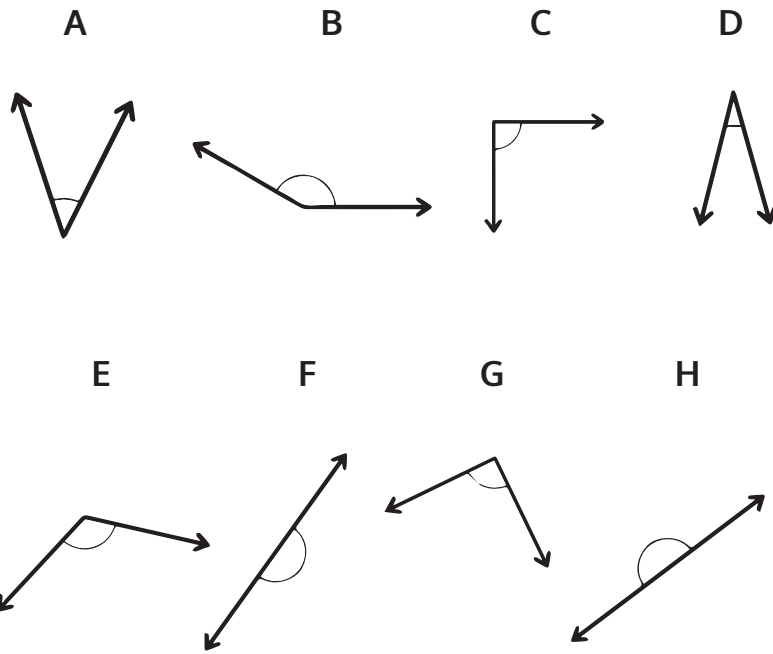
1. Fill in the blanks to make true statements using one of the following words: **acute**, **obtuse**, **right**.

a. An _____ angle is smaller than a right angle.

b. An _____ angle is larger than a right angle, but smaller than a straight angle.



2. Use a right angle template or square corner to identify the angles below.



- a. Which angles are right angles? _____
- b. Which angles are obtuse angles? _____
- c. Which angles are acute angles? _____
- d. Which angles are straight angles? _____



Lesson 3
G:4 M:4

Two Lines Make a Right

ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

Class: _____

You will need a right angle template or square corner for this lesson.

1 Perpendicular lines intersect to make:

2 Using your right angle template, find and trace right angles in Mr. Sawicki's pictures.





Use your pencil and ruler to draw \overline{CD} . Then, use your right angle template to draw a line perpendicular to \overline{CD} .



Lesson 3
G:4 M:4

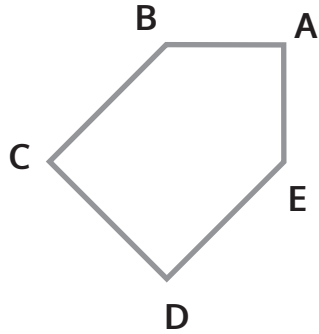
EXIT TICKET

Name: _____ Date: _____

Complete: Class: _____

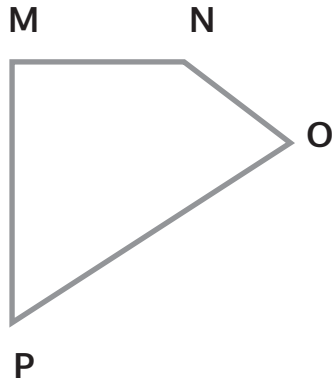
Use a right angle template or square corner to measure the angles in the following figures. Mark each right angle with a small square. Then, name all pairs of perpendicular sides.

1.



$\overline{BC} \perp$ _____

2.



$\overline{MN} \perp$ _____



Lesson 4
G:4 M:4

Can't Touch This!

ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete: Class: _____

You will need a ruler for this lesson.

- 1 Put your ruler in the drawing area. Then, trace along the two sides of your ruler. Add arrows to the end of your pencil marks.

DRAW

SOLVE

Parallel lines _____
no matter how far you extend them.



2

Using your ruler, find and trace parallel lines in Mr. Sawicki's photos.

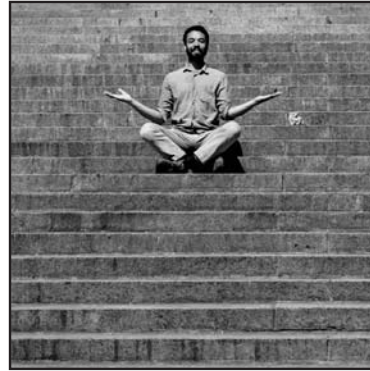
Not all of these photos have parallel lines. Mark only the parallel lines that you see.



A



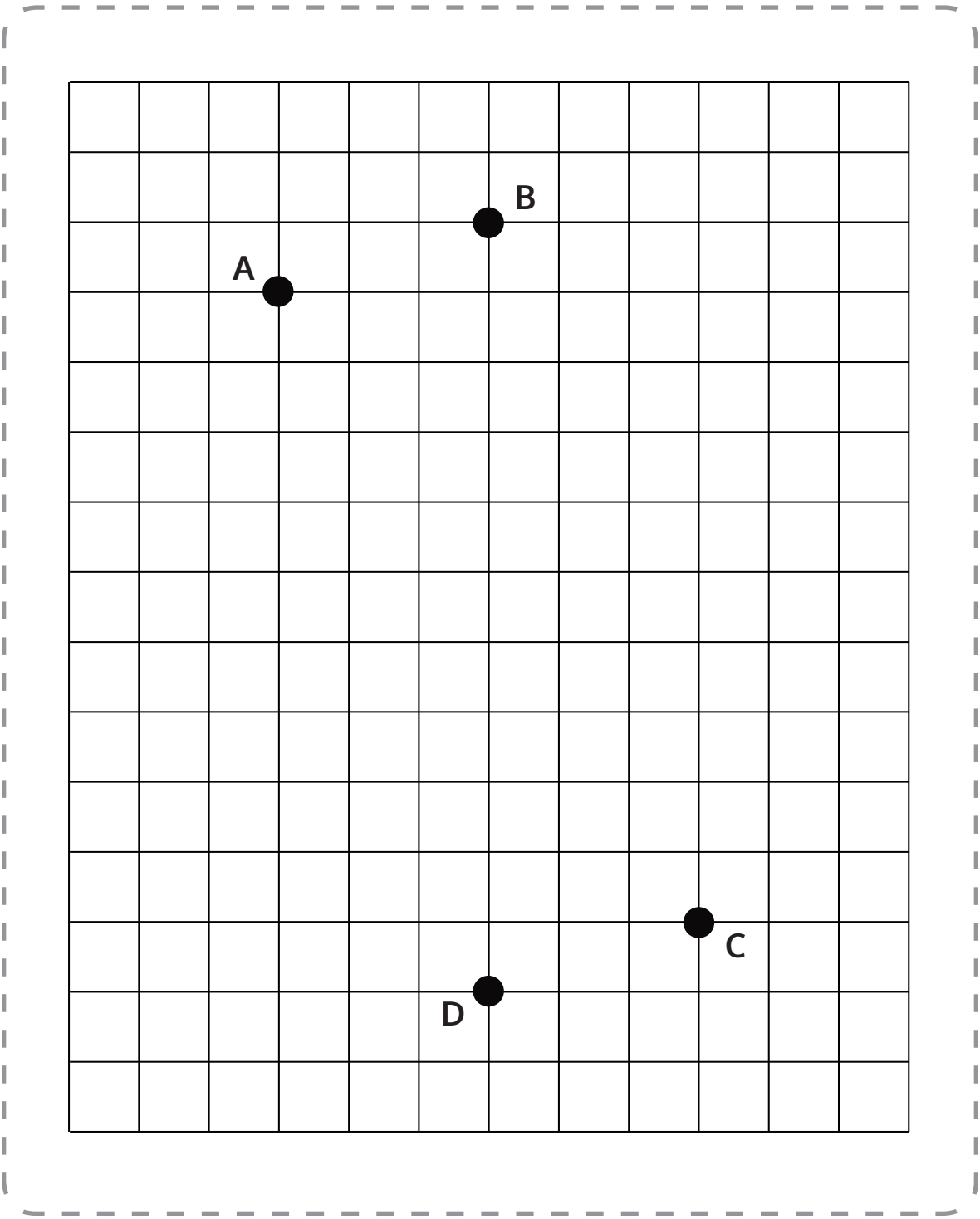
B



C

3

Draw rectangle ABCD on the grid



4

Using your straight edge, draw the horizontal line \overleftrightarrow{XY} and parallel line \overleftrightarrow{ST} .

X
●

Y
●

\overleftrightarrow{XY} _____ \overleftrightarrow{ST}

EXTRA WORKSPACE



Lesson 4
G:4 M:4

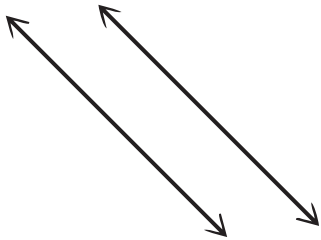
EXIT TICKET

Name: _____ Date: _____

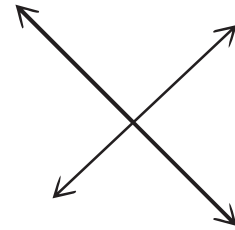
Complete:

Class: _____

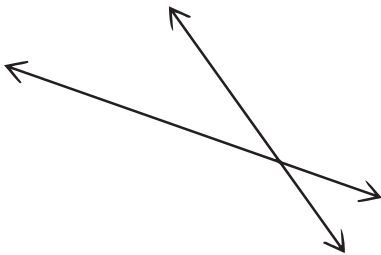
1. Look at the following pairs of lines. Identify if they are parallel, perpendicular, or intersecting.



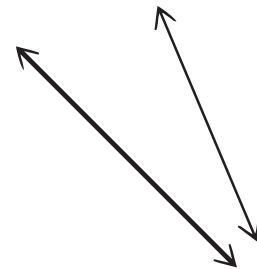
a. _____



b. _____



c. _____



d. _____



Lesson 5
G:4 M:4

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. How many right angles make a full turn? _____

2. What is the measurement of a right angle? _____

3. What fraction of a full turn is 1° ? _____

4. Name at least four benchmark angle measurements.



Lesson 6
G:4 M:4

To a Degree

ZEARN STUDENT NOTES

Name: _____ Date: _____

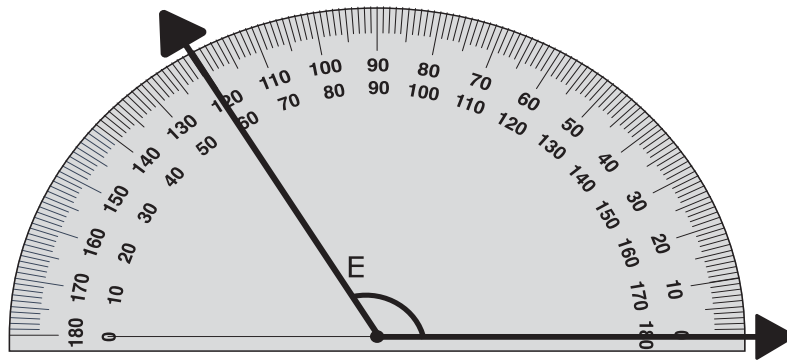
Complete:

Class: _____

1

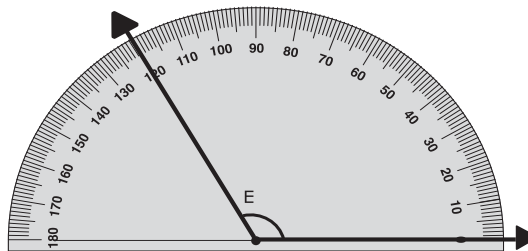
Use these two protractors to measure angle E.

Protractor 1



$\angle E = \underline{\quad}^\circ$

Protractor 2



$\angle E = \underline{\quad}^\circ$



EXTRA WORKSPACE



Lesson 6
G:4 M:4

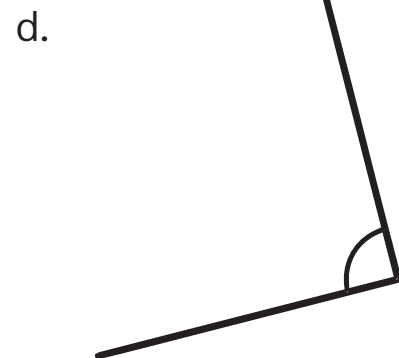
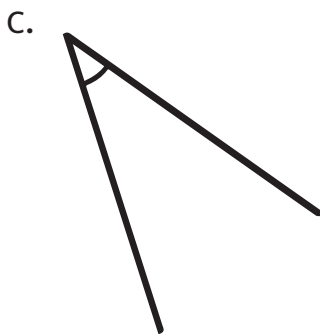
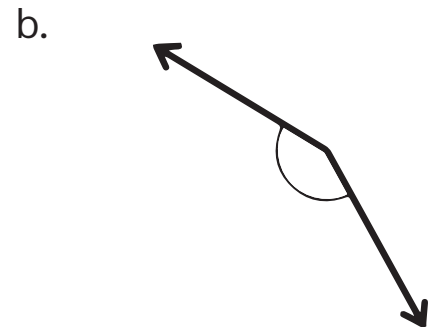
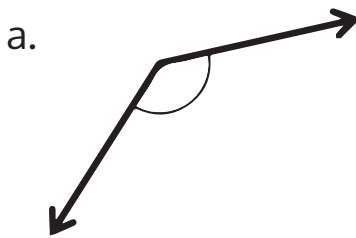
EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. Use any protractor to measure the angles, and then record the measurements in degrees.



Lesson 7
G:4 M:4

Make and Measure

ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

Class: _____

You will need a protractor for this lesson.

- 1** Draw an 80° angle.

DRAWING AREA



2

Draw a 133° angle.

DRAWING AREA



Lesson 7
G:4 M:4

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. Construct angles that measure the given number of degrees.
Draw an arc to indicate the angle that was measured.

a. 75°

b. 105°

c. 81°

d. 99°



Lesson 8
G:4 M:4

Turn, Turn, Turn

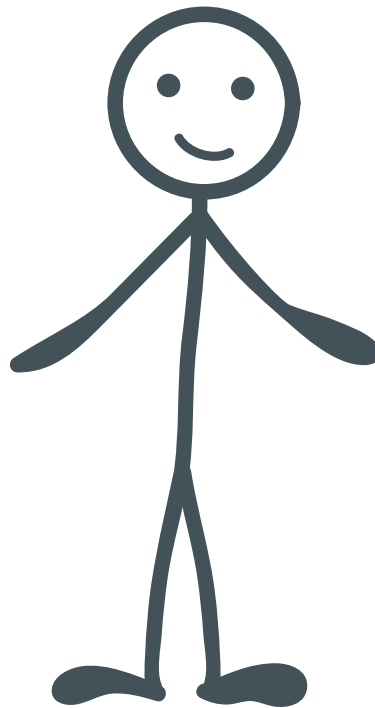
ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

Class: _____

- 1 If Mr. Sawicki makes two quarter turns in the same direction, how many degrees will he have turned?



Mr. Sawicki will have turned _____°.



EXTRA WORKSPACE



Lesson 8
G:4 M:4

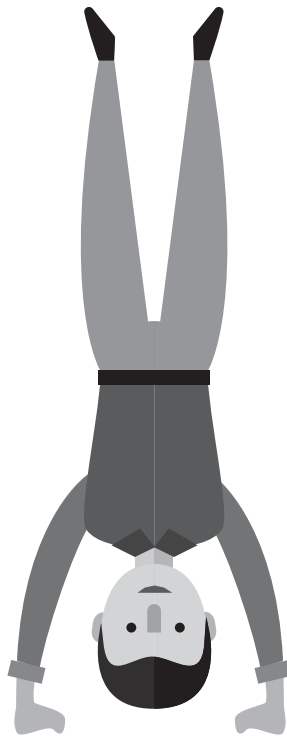
EXIT TICKET

Name: _____ Date: _____

Complete:

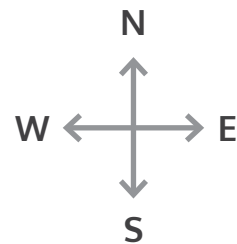
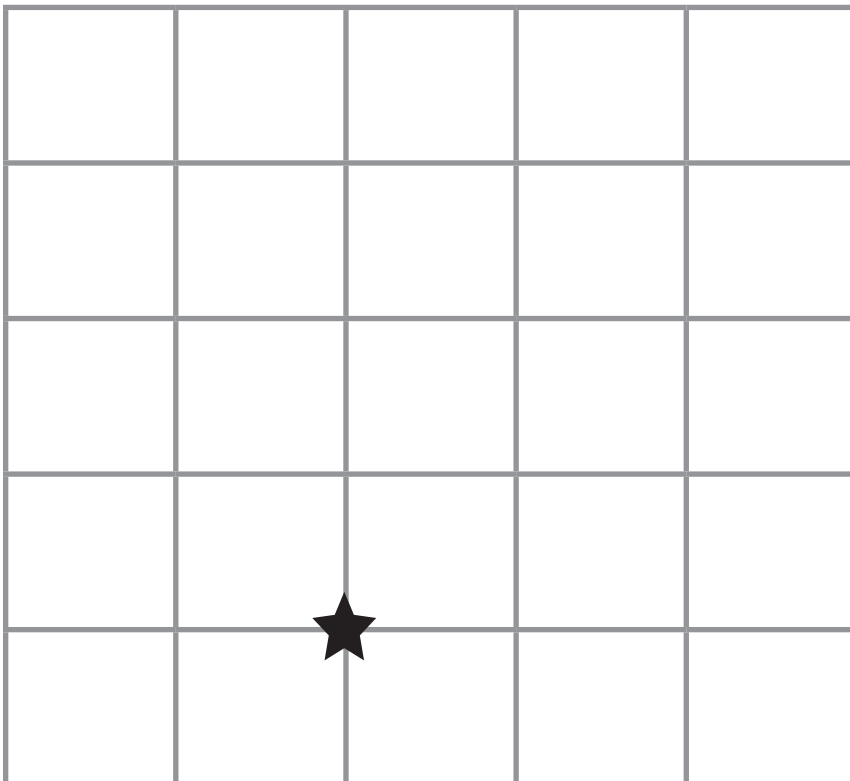
Class: _____

1. Marty was doing a handstand. Describe how many degrees his body will turn to be upright again.





2. Jeffrey started riding his bike at the ★. He traveled north for 3 blocks, then turned 90° to the right and rode for 2 blocks. In which direction was he headed? Sketch his route on the grid below. Each square unit represents 1 block.





Lesson 9
G:4 M:4

EXIT TICKET

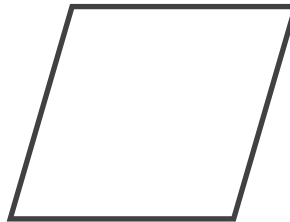
Name: _____ Date: _____

Complete:

Class: _____

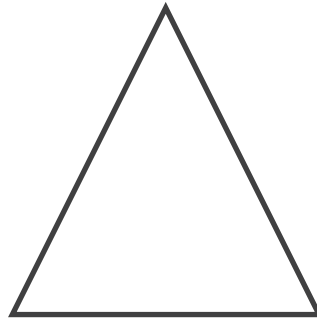
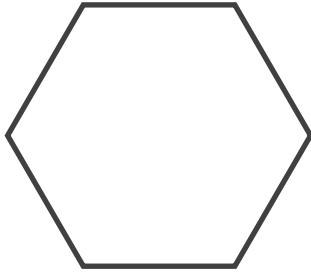
1. Describe and sketch two combinations of the rhombus pattern block that create a straight angle.

SHOW YOUR WORK



2. Describe and sketch two combinations of the triangle and hexagon pattern block that create a straight angle.

SHOW YOUR WORK



Lesson 10
G:4 M:4

The Great Angle Mystery

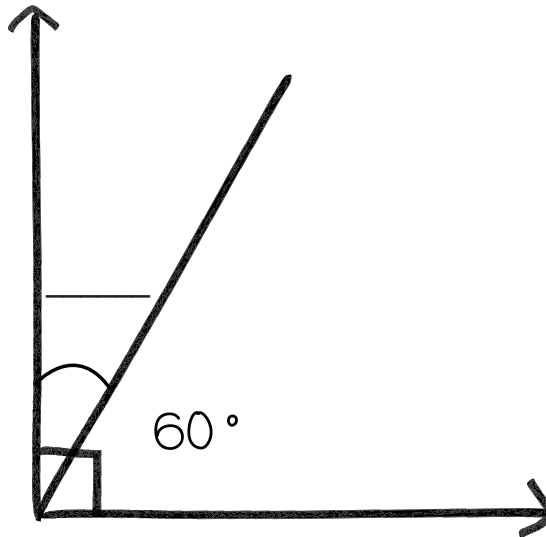
ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

Class: _____

- 1 Write a subtraction equation and solve for the unknown angle.



SHOW YOUR WORK

$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

Unknown angle = $\underline{\quad}^\circ$



EXTRA WORKSPACE



Lesson 10
G:4 M:4

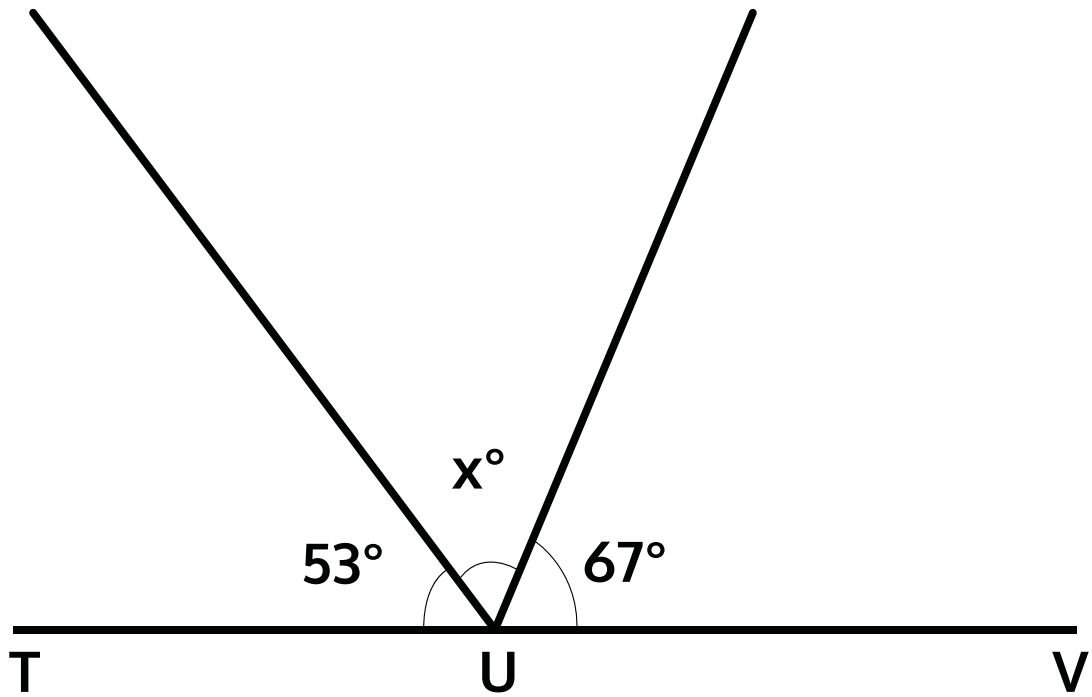
EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. Write an equation and solve for x . $\angle TUV$ is a straight angle.



Equation: _____

$x^\circ =$ _____



Lesson 12
G:4 M:4

So Symmetrical

ZEARN STUDENT NOTES

Name: _____ Date: _____

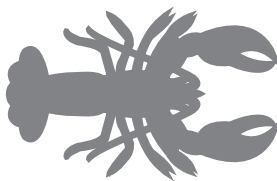
Complete:

Class: _____

You will need a pair of scissors for this lesson.

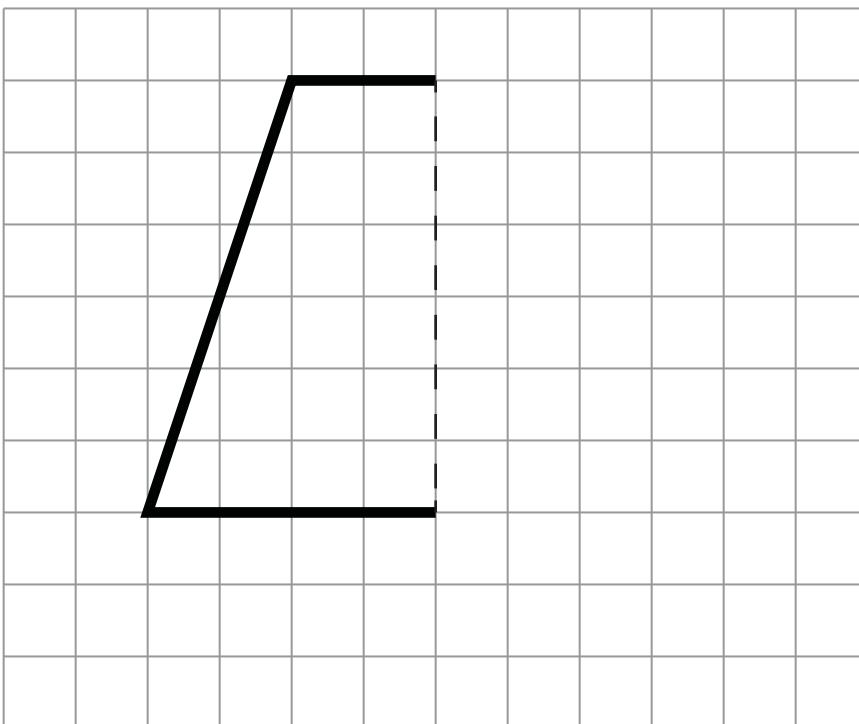
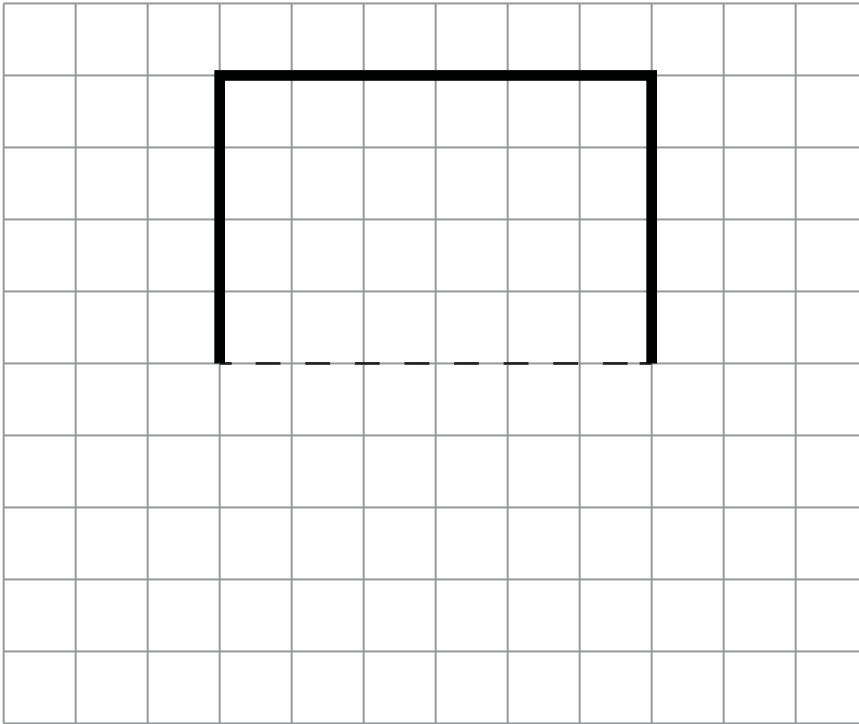
1 Use scissors to cut out the shapes on the last page.

2 Look at each image below and determine whether there are any lines of symmetry. If you find any, draw the line that would be created by the fold.



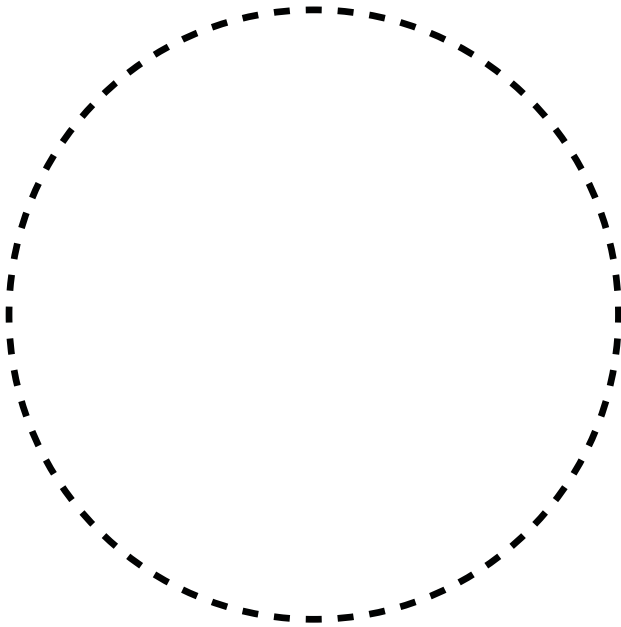
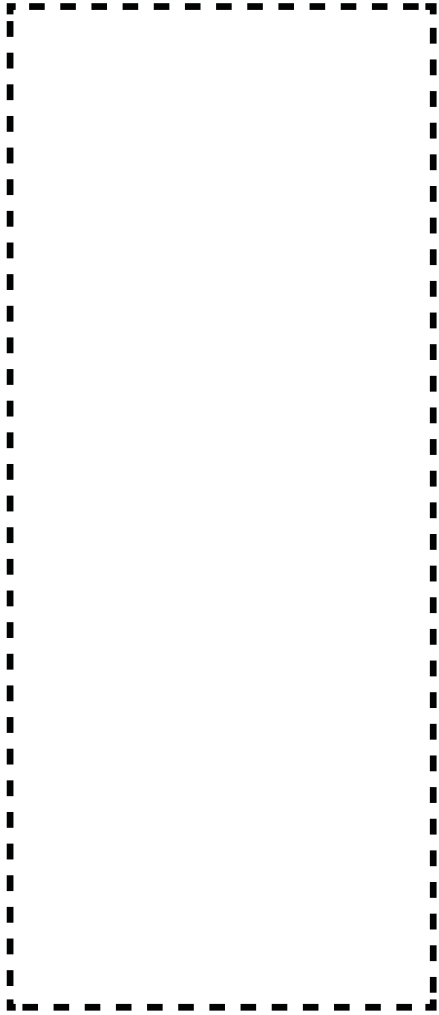
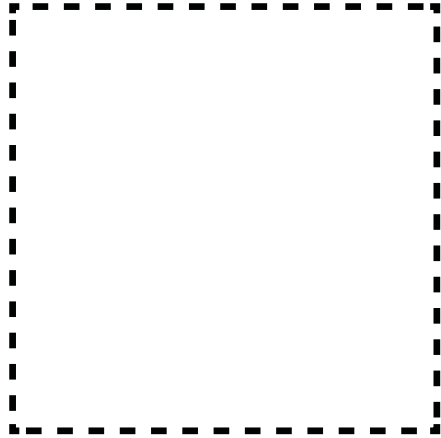
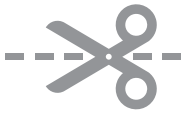
3

Use the grid to make a mirror image of the figures that are already drawn.



1

Cut the shapes along the dashed lines.



Lesson 12
G:4 M:4

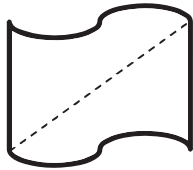
EXIT TICKET

Name: _____ Date: _____

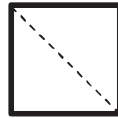
Complete:

Class: _____

1. Is the line drawn a line of symmetry? Circle your choice.



Yes No

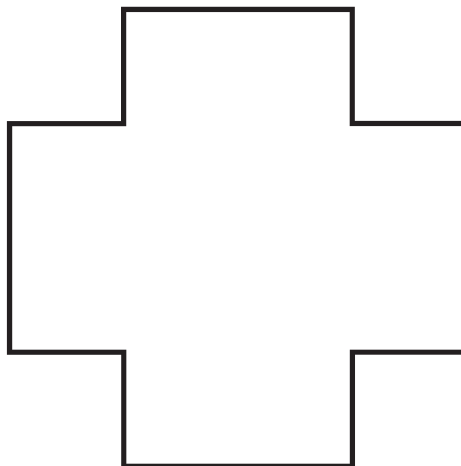


Yes No



Yes No

2. Draw as many lines of symmetry as you can find in the figure below.



Lesson 13
G:4 M:4

Name That Triangle

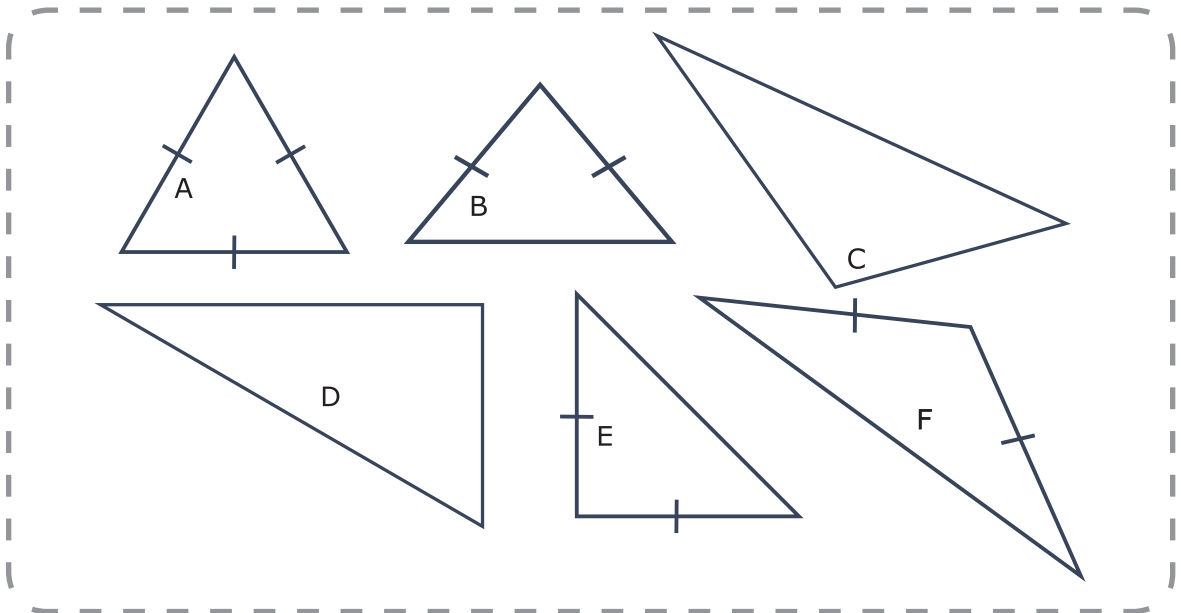
ZEARN STUDENT NOTES

Name: _____ Date: _____

Complete:

Class: _____

1 Look at Triangles A - F. Which have no equal sides? 2 equal sides? 3 equal sides?

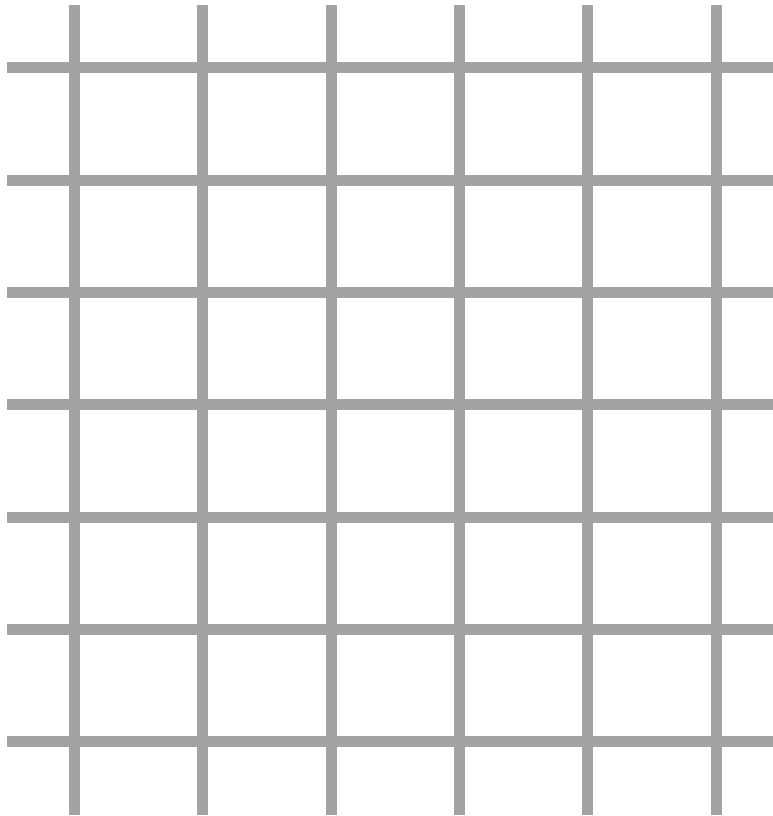


	3 equal sides	2 equal sides	no equal sides
Triangles			



2

Use the grid to draw a triangle. Plot three points and label them A, B, and C. Connect the points with line segments to make a triangle.



Lesson 13
G:4 M:4

EXIT TICKET

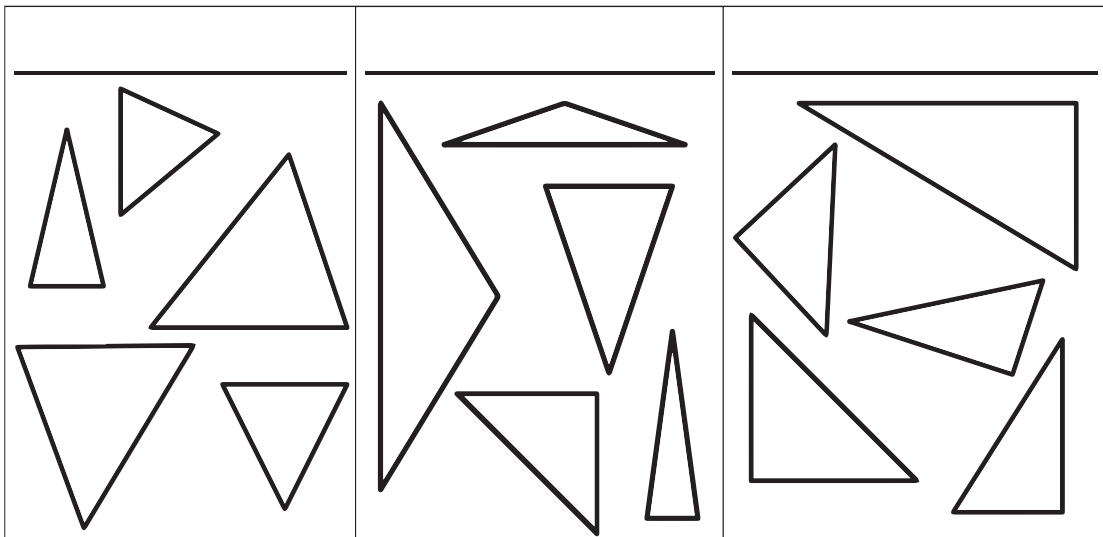
Name: _____ Date: _____

Complete:

Class: _____

Use appropriate tools to solve the following problems.

1. The triangles below have been classified by shared attributes (side length or angle type). Use the words **acute**, **right**, **obtuse**, **scalene**, **isosceles**, or **equilateral** to label the headings to identify the way the triangles have been sorted.



2. Draw lines to identify each triangle according to angle type **and** side length.

Acute

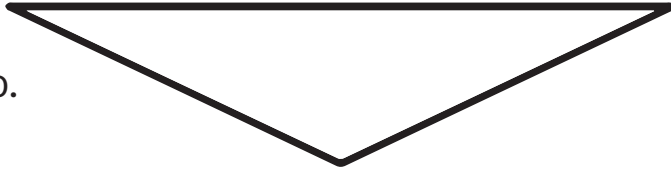
a.



Obtuse

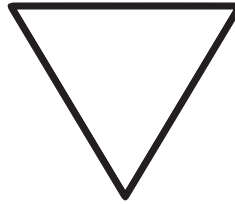
Right

b.



Isosceles

c.



Equilateral

Scalene

3. Identify and draw any lines of symmetry in the triangles in Problem 2.



Lesson 14
G:4 M:4

EXIT TICKET

Name: _____ Date: _____

Complete:

Class: _____

1. Draw an obtuse isosceles triangle, and then draw any lines of symmetry if they exist.



2. Draw a right scalene triangle, and then draw any lines of symmetry if they exist.



3. Every triangle has at least _____ acute angles.



Lesson 15
G:4 M:4

Four Sides — Four Angles

ZEARN STUDENT NOTES

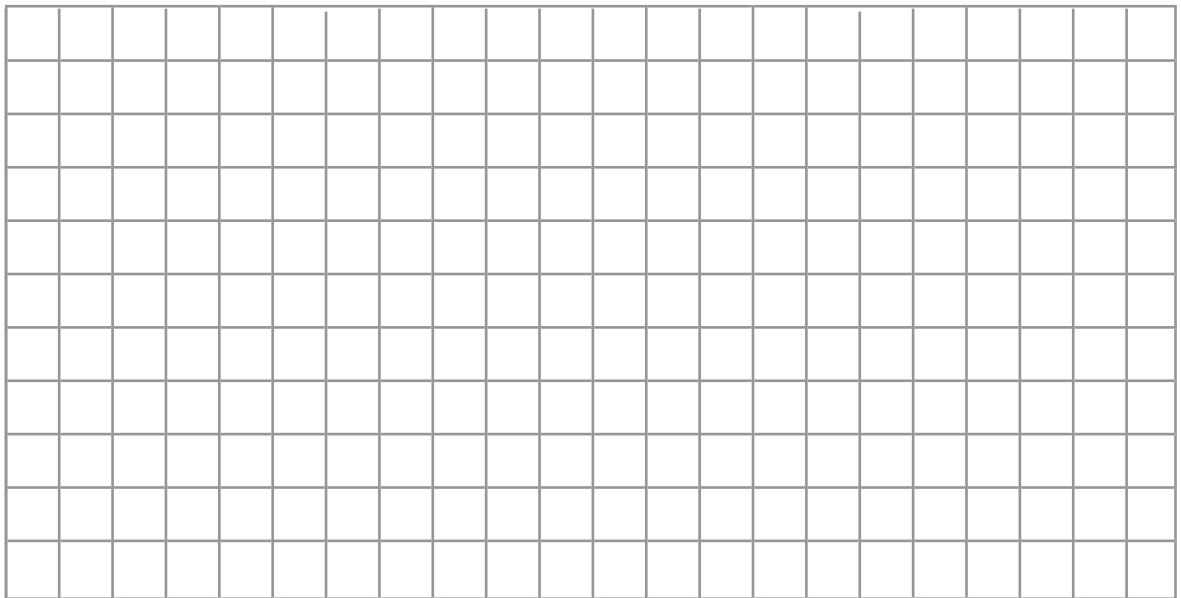
Name: _____ Date: _____

Complete:

Class: _____

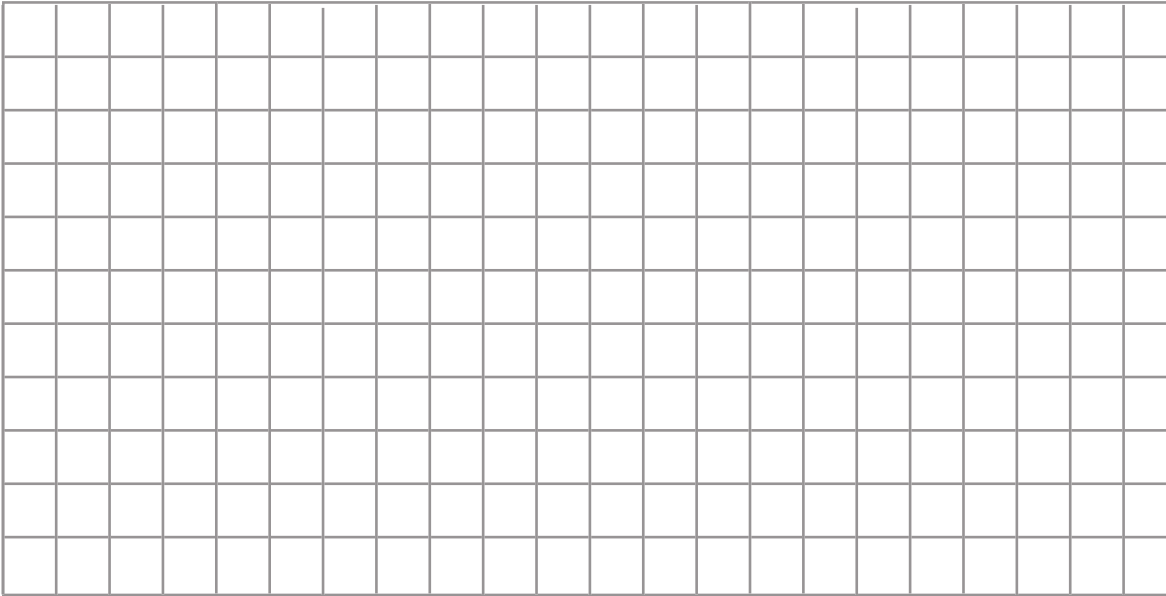
You will need a straight edge for this lesson.

- 1 Draw a quadrilateral with a least **one** set of parallel sides.



2

Draw a quadrilateral with **two** sets of parallel sides.



EXTRA WORKSPACE



Lesson 15
G:4 M:4

EXIT TICKET

Name: _____ Date: _____

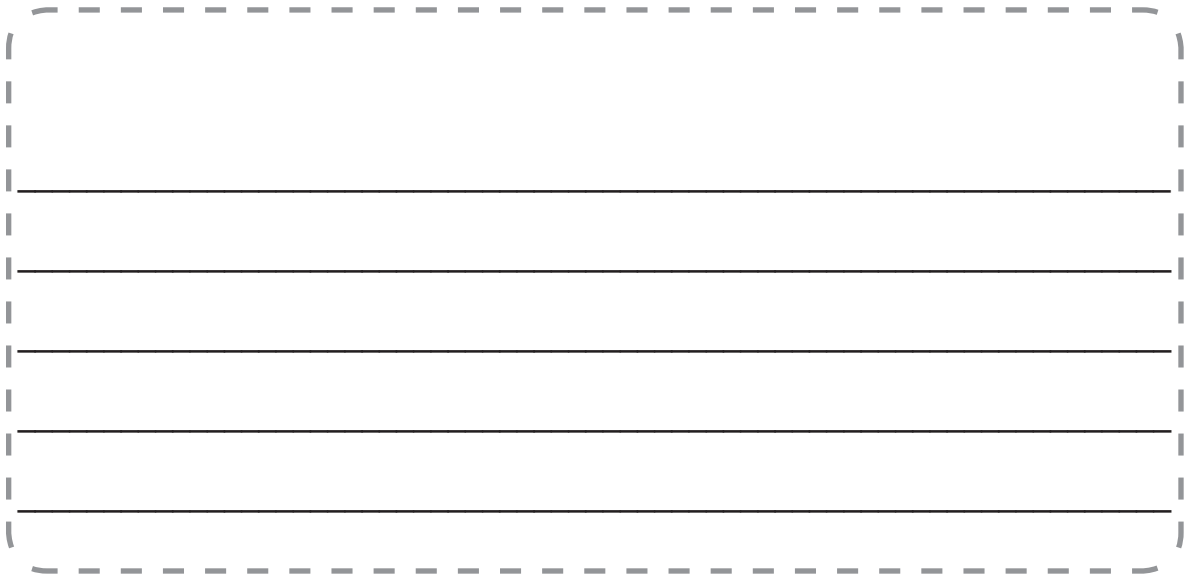
Complete:

Class: _____

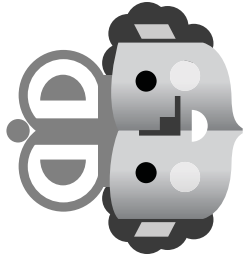
1. In the space below, draw a parallelogram.



2. Explain why a rectangle is a special parallelogram.



ZEARN



Congratulations!
You completed

Grade 4 Mission 4

Construct Lines, Angles, and Shapes

.....
Name

.....
Date



