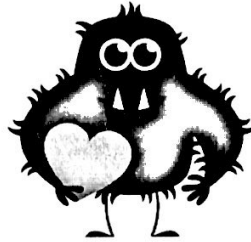# Weekly Math

HOMEWORK

February 9 - 13

DUE TUESDAY: "Points, Lines, and Line Segments"
DUE THURSDAY: "Points, Line Segments, Lines, and Rays"
AND "Rays and Angles"
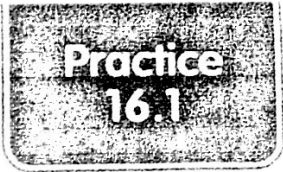**DUE FRIDAY:** "Parallel Lines and Perpendicular Lines"

My timed test on FRIDAY is on the _____ facts!

Class website: http://mrsbucksmathclass.weebly.com

Name _____
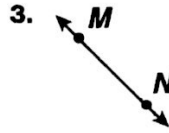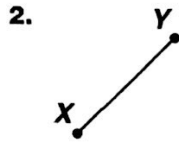
*Parent Signature*_____

*Due Tuesday! *

Points, Lines, and Line Segments

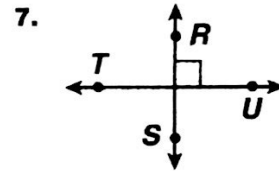Use <u>words</u> <u>and</u> <u>symbols</u> to name each figure.

1. A •

2. Y / X

3. M \ N

4. X •

_____   _____   _____   _____
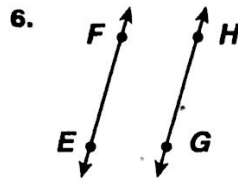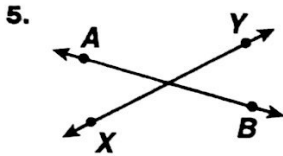
_____   _____   _____   _____

Write *parallel*, *intersecting*, or *perpendicular* to best describe the relationship between each pair of lines.

5. A Y X B

6. F H E G

7. T R U S

_____   _____   _____

Draw an example of each.

8. horizontal line *XY*

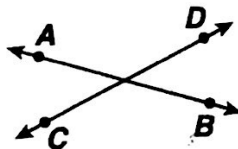9. parallel lines $\overleftrightarrow{AB}$ and $\overleftrightarrow{CD}$

10. line segment *MN*

_____   _____   _____

✓ Test Prep

11. Which best describes the lines $\overleftrightarrow{AB}$ and $\overleftrightarrow{CD}$?

A D C B

   A parallel   **C** point

   B intersecting   **D** perpendicular

12. Can two lines intersect and be perpendicular? Draw a picture to explain.

_____

Name: _____

Points, Line Segments, Lines, and Rays

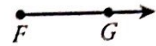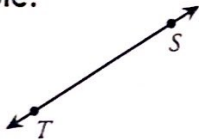| Point	Line Segment	Line	Ray
• A	•——• B C	←•——•→ D E	•——•→ F G
A **point** is pictured by a dot. It is named with a capital letter. This is point A.	A **line segment** is a straight path between 2 points. This is line segment BC or CB. It is written $\overline{BC}$ or $\overline{CB}$.	A **line** is a straight path that goes on forever in **both** directions. This is line DE or ED. It is written $\overleftrightarrow{DE}$ or $\overleftrightarrow{ED}$.	A **ray** is a straight path that goes on forever in **one** directions. This is ray FG. It is written $\overrightarrow{FG}$.

Write if each is a **point**, **line segment**, **line**, or **ray** and its name.

Example:

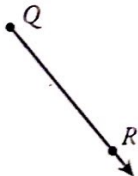Line TS or ST $\overleftrightarrow{TS}$ or $\overleftrightarrow{ST}$

1.

_____

2.

_____

3.

_____

4.

_____

5.

_____

6.

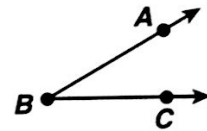_____

7.

_____

8.

_____

Scanned by CamScanner

Rays and Angles

A **ray** is the part of a line which begins at a point and continues in one direction. $\overrightarrow{EF}$ is read as ray EF
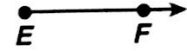
The sides of an **angle** are made up of rays.
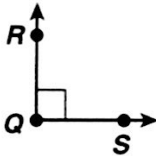$\overrightarrow{BA}$ and $\overrightarrow{BC}$ make up the angle.
The common endpoint is the **vertex.**
    B is the vertex of the angle.
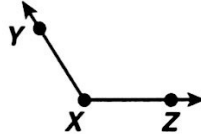When you name an angle, the vertex is always the middle letter.
    The angle is named $\angle ABC$, $\angle CBA$, or $\angle B$.
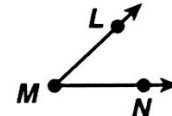
A **right angle** forms a square corner.	An **obtuse angle** is greater than a right angle.	An **acute angle** is less than a right angle.
$\angle RQS$, $\angle SQR$, or $\angle Q$	$\angle YXZ$, $\angle ZXY$, or $\angle X$	$\angle LMN$, $\angle NML$, or $\angle M$

* Name each angle in three ways.
* Then classify the angle as *obtuse, right,* or *straight.*

1. Example

Type of angle:
___right___

1. $\angle YXZ$
2. $\angle ZXY$
3. $\angle X$

2.

Type of angle;
_____

1.
2.
3.

3.

Type of angle:
_____

1.
2.
3.

4.

Type of angle:
_____

1.
2.
3.

5.

Type of angle:
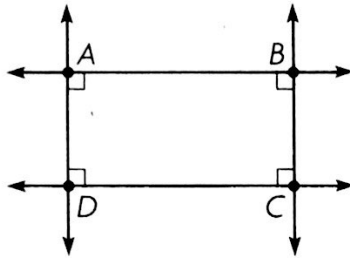_____

1.
2.
3.

6.

Type of angle:
_____

1.
2.
3.

Parallel Lines and Perpendicular Lines

Parallel lines are lines in a plane that are always the same distance apart. Parallel lines or line segments never meet.

In the figure, lines *AB* and *CD*, even if extended, will never meet. The lines are parallel. Write $\overleftrightarrow{AB} \| \overleftrightarrow{CD}$.

Lines __AD__ and __BC__ are also parallel. So, $\overleftrightarrow{AD} \| \overleftrightarrow{BC}$.

Intersecting lines cross at exactly one point. Intersecting lines that form right angles are **perpendicular.**

In the figure, lines __AD__ and __AB__ are perpendicular because they form right angles at vertex *A*. Write $\overleftrightarrow{AD} \perp \overleftrightarrow{AB}$.

Lines __BC__ and __CD__ are also perpendicular. So, $\overleftrightarrow{BC} \perp \overleftrightarrow{CD}$.

Use the figure for 1–3.

1. Name two sides that appear to be parallel.

   _____

2. Name two sides that appear to be perpendicular.

   _____

3. Name two sides that appear to be intersecting, but not perpendicular.

   _____