Bellwork #5
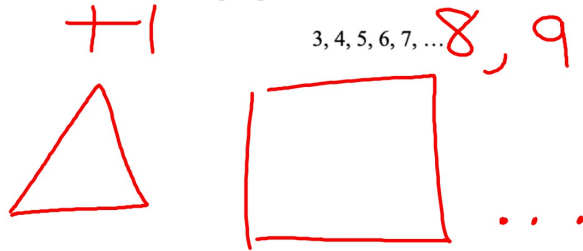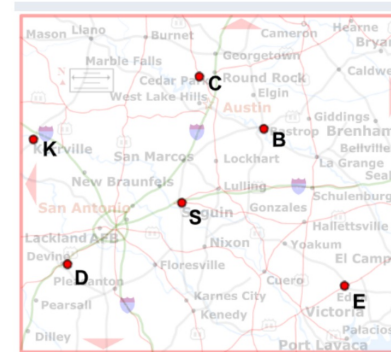
REINFORCE

Find the next two items in the sequence of numbers and write the rule. Find a geometric representation for the following sequence of numbers.
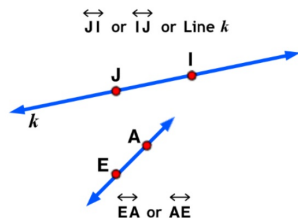
+1

3, 4, 5, 6, 7, … 8, 9

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3. Point: A point describes a location, but has no size.

A point is named with a capital letter.

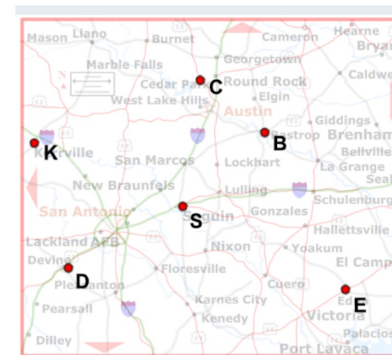4. Line: A line is made up of infinite points and extends forever in ___both___ directions.
Opposite

5. Lines are named using any ___2___ points on the line or a ___lowercase___ letter.

$\overleftrightarrow{JI}$ or $\overleftrightarrow{IJ}$ or Line k

J   I

k

A

E

$\overleftrightarrow{EA}$ or $\overleftrightarrow{AE}$

Points that lie on the same line are called ___collinear___ points.

Are D, S, and B collinear?

They are called ___non collinear___ points.

6. Line segment: A _portion_ of a line between 2 _points_

These 2 points are called the _endpts_ of the segment.

7. What is meant by the notations:

AE means _measure, distance, length_

$\overline{AE}$ means _line segment_

$\overleftrightarrow{AE}$ means _line_

8. A ray is a _subset_ of a line.

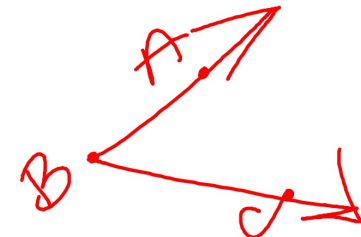A ray starts at one _point_ on a line and extends _forever_ in one direction.

9. The _endpt_ must always be written first.
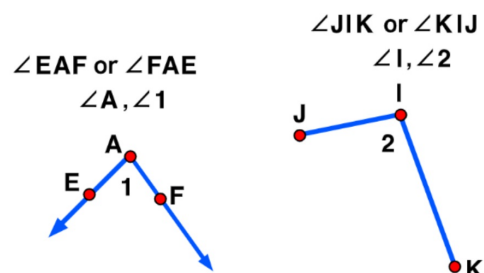
F ———→ E   I J →

10. An angle is 2 _rays_ that share the same _endpt_.

The common endpoint is called the _vertex_ of the angle.
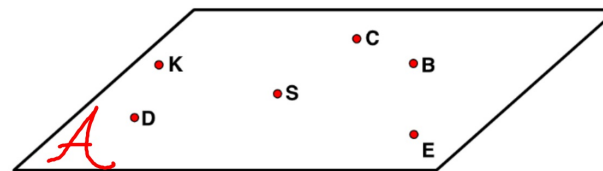
The rays forming the angle are the _sides_ of the angle.

A B C

We can name an angle several ways.
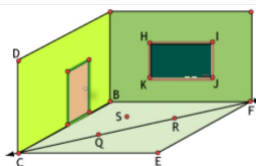
∠EAF or ∠FAE
∠A, ∠1

∠JIK or ∠KIJ
∠1, ∠2

1) With its vertex point
2) With 3 points that form it (vertex in center)
3) With a number, if there is a number.

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12. A plane is a flat surface that extends in all directions.

• C
• K
• B
• S
• D
A
• E

A plane can be named using any three points in the plane that do not lie on the same line, or by a cursive capital letter. You will have opportunities later in the course to work with planes and to discover their properties. Points that lie on the same plane are called *coplanar points.*

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14. REINFORCE

a. Name two points in the room diagram that are collinear with points C and F.

•R, •Q

b. Point J is noncollinear with points H and K. Name another point that is noncollinear with points H and K.

I   any other pt

c. Points C, Q, and S are coplanar points. Name another point on the floor that is coplanar with C and Q.

R, E, B, F

d. Points A, B, and F are noncoplanar with point C. Name another point in the room that is noncoplanar with A, B, and F.

R, E, D, S, Q

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17. Supplementary angles are 2 angles that __add up to__ 180

Example: 90, 90 ; 170
10

18. Complementary angles are 2 angles that __add up to 90__

Example: 45 45 ; 89 1
70 20

19. Congruent Figures:

Two figures are __*≅*__ if they have the same _shape_ and _size_ .