

Name: Key

## Basics of Geometry Review

Use the figure at the right to answer the questions below.

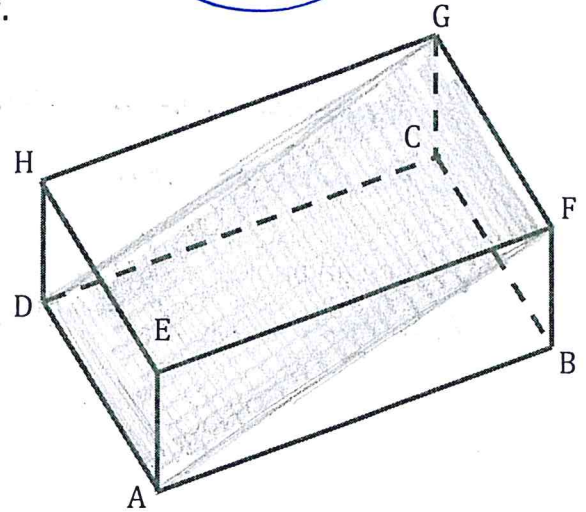
Name the plane represented by the given surface of the box.

1. top: PLANE HEF

2. back: PLANE CEF

ANSWERS MAY VARY

3. Shade the plane that contains the points  $G, F, A$ , and  $D$ .



4. Is point  $H$  coplanar with points  $G, F, E$ ?

YES

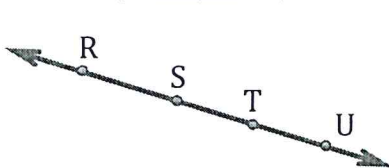
5. Are  $D, C, A, F$  coplanar? Explain

NO, ANY 3 OF THEM CAN BE COPLANAR, BUT  $F$  CANNOT BE COPLANAR WITH  $D, C, A$

6. Are  $\overleftrightarrow{XY}$  and  $\overleftrightarrow{YX}$  the same? Explain.

NO, THEY HAVE DIFFERENT ENDPOINTS AND GO TO INFINITY IN DIFFERENT DIRECTIONS

7. How many unique rays are in the below picture? **Name them**



6 RAYS

$\overrightarrow{RU}$   
 $\overrightarrow{SU}$   
 $\overrightarrow{TU}$

$\overrightarrow{UR}$   
 $\overrightarrow{TR}$   
 $\overrightarrow{SR}$

Use the figure to answer the below questions



8. How many unique segments are in the figure?

A) 16

B) 8

C) 6

D) 10

9. What is another name for  $\overleftrightarrow{CA}$ ?


A)  $\overleftrightarrow{AC}$

B)  $\overleftrightarrow{CB}$

C)  $\overleftrightarrow{CE}$

D)  $\overleftrightarrow{DC}$

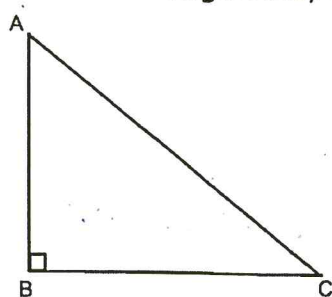
10. What is the difference between collinear and coplanar?

COLLINEAR SIMPLY MEANS "ON THE SAME LINE"  $\longleftrightarrow$   
COPLANAR MEANS "ON THE SAME PLANE" 

11. Define an angle.

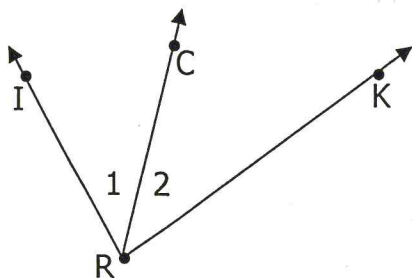
AN ANGLE IS 2 RAYS SHARING A COMMON ENDPOINT.

12. In the triangle ABC, name the rays that form  $\angle A$



$\overrightarrow{AB}$   
 $\overrightarrow{AC}$

13. Name all the angles that have R as a vertex.



$\angle 1$   
 $\angle 2$   
 $\angle IRK$

14. What are supplementary angles? What are complementary angles?

SUPPLEMENTARY ANGLES ARE 2 ANGLES WHICH SUM TO  $180^\circ$

COMPLEMENTARY ANGLES ARE 2 ANGLES WHICH SUM TO  $90^\circ$