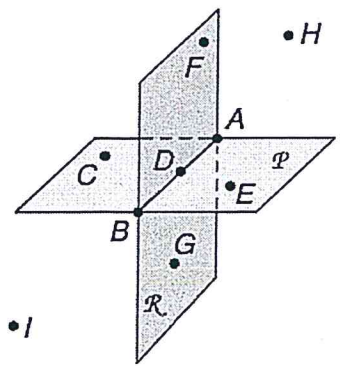
Test #1 Review

Name: Key

1) I can identify and label a point, line, segment, ray and plane.

a)



Name a point A (Answers may vary)

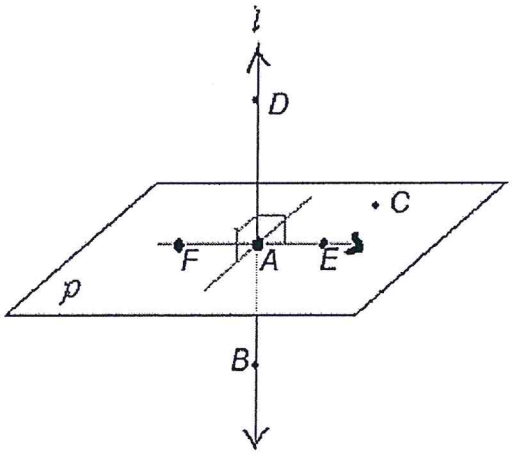
Name a segment AB (Answers may vary)

Name the horizontal plane in two different ways P, CDA (Answers may vary)

Are points B, C and I coplanar? Why?

NO, Because I is not in the plane

b)



Name all possible lines, rays and segments formed by points D and B

$\overleftrightarrow{DB}$, $\overrightarrow{DB}$, $\overline{DB}$, $\overleftrightarrow{AD}$, $\overrightarrow{AD}$, AD

$\overleftrightarrow{AB}$, $\overrightarrow{AB}$, $\overline{AB}$ (you can have more)

Name the vertical line in two different ways $\overleftrightarrow{DB}$, $\overleftrightarrow{AB}$

$\overrightarrow{AE}$ is an example of Ray

Name all the coplanar points related to the given plane F, A, E, C

Name all the points not on the given plane D, B

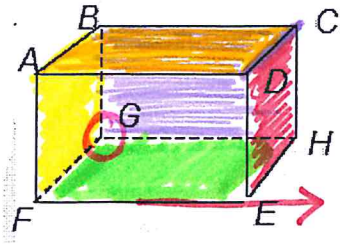
Are points A, B and C collinear? Why? NO, They do not line up.

Are points C and D collinear? Why? Yes, They line up.

Name two opposite rays $\overrightarrow{AD}$, $\overrightarrow{AB}$

Name the given plane in two different ways P, FAC (Answers may vary)

c)



Name the plane represented by the top of the box. ABC (Answers May vary)

Name the intersection of plane DCH and plane ABC $\overline{DC}$

Name the intersection of plane FGH, plane BCH and plane ABF G

Modify the drawing in such way that $\overline{EF}$ *becomes* $\overrightarrow{FE}$.

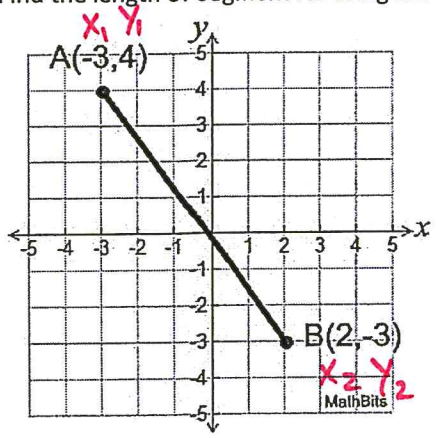
Draw an arrow passed E.

2) Use/know/apply appropriate formulas based on the context

- distance formula

- midpoint formula

a) Find the length of segment AB using the diagram below. **Round your answer to the nearest tenth. 1 unit = 1 inch**



$x_1\ y_1$

$d = \sqrt{(2-(-3))^2 + (-3-4)^2}$

$d = \sqrt{5^2 + 7^2}$

$d = \sqrt{74}$

Length = 8.60 inches

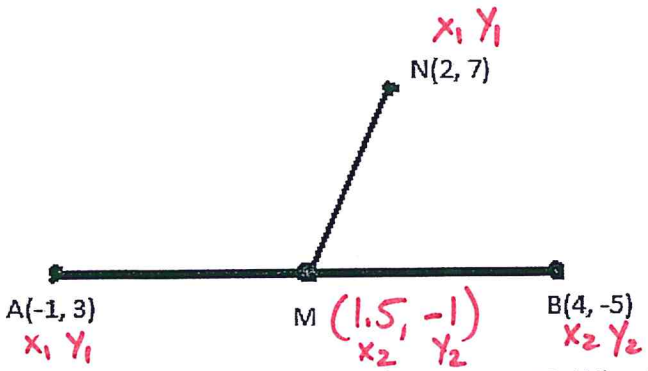
b) If an objects travel from A(-5, -6) to B(3, 5) and then to C(8, -2), what is the **total distance traveled**?

D1= $AB = \sqrt{185} = 13.60$

D2= $BC = \sqrt{74} = 8.60$

D1+D2= $AB + BC = 13.60 + 8.60 = \boxed{22.2}$

c)



$x_1\ y_1$ $x_1\ y_1$ $x_2\ y_2$ $x_2\ y_2$

$M\left(\frac{-1+4}{2}, \frac{3-5}{2}\right)$

In the figure above **M is the midpoint** of the segment AB. What is the **length of the segment MN**?

M (1.5 , -1)

MN= $\sqrt{64.25} = 8.02$

d) The amusement park that you are going to is mapped on a coordinate grid with entrance being at the origin (0, 0). Picture booth is located at the point (1, 5) and Food stand is located at (4, 9). If you walked from the entrance to the picture booth, then to the food stand what was your **total** distance walked if **1 unit = 1 yard**?

D1= 5.09 yard

D2= 5 yard.

D1+D2= 5.09 + 5 = 10.09 yard

Total Distance Walked = 10.09 yard

$x_1\ y_1$ $M(-2, -8)$

e) The segment FG has the endpoint F at (-3, -5). If its midpoint has the coordinates (-2, -8), what are the coordinates of the other endpoint, G?

$\frac{-3+x_2}{2} = \frac{-2}{1}$ $x_2 = -1$

$\frac{-5+y_2}{2} = \frac{-8}{1}$ $y_2 = -11$

G(-1, -11)