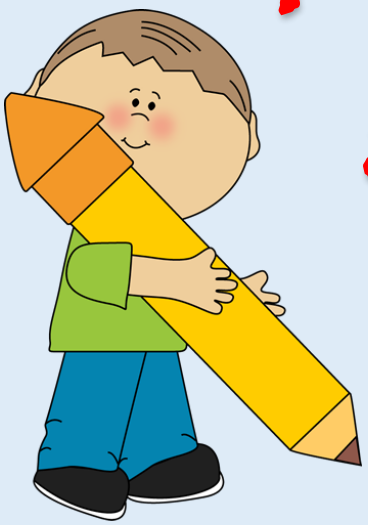
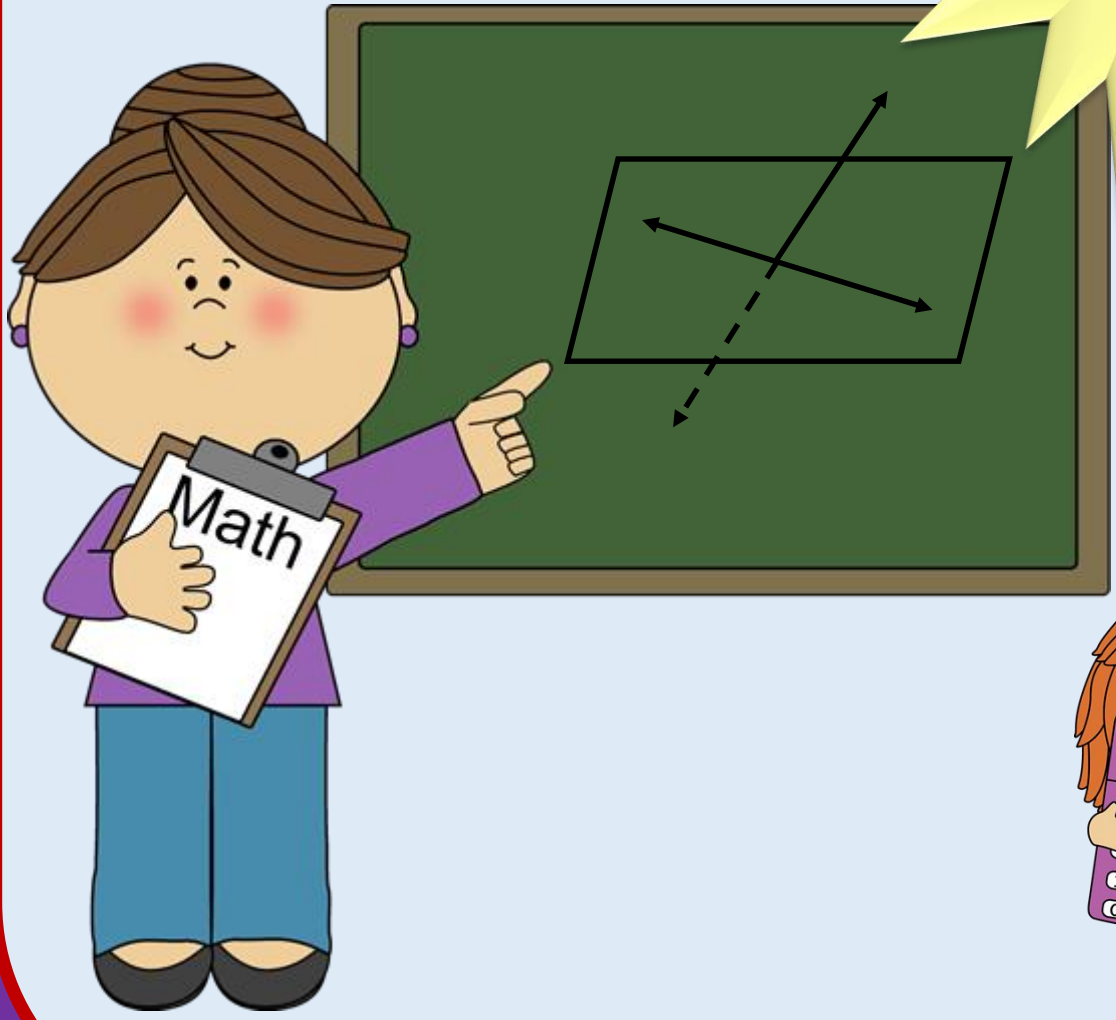
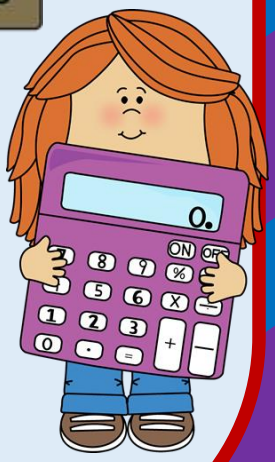
My Geometry World

Points, Lines, and Planes



- ✓ Notes
- ✓ Examples
- ✓ Worksheet
- ✓ Answer Key





By: My Geometry World

Name_____ Date_____ Period_____

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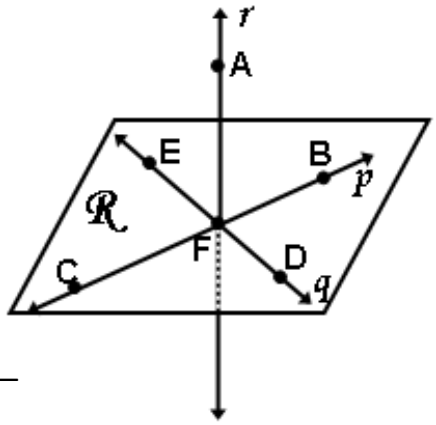
Refer to the figure at the right for questions 1 – 6 to name each of the following



1. A line containing point A_____

2. A line through point E_____

3. A plane containing points B, C, and D_____

4. A plane containing lines p and q_____

5. Another name for line r_____

6. Another name for plane $\mathcal{R}$_____

Sketch the following

7. A plane S containing the point B.

8. A plane ABC containing $\overleftrightarrow{XY}$.

9. A line j containing collinear points W and L.

10. A plane XYZ containing three coplanar points.

Use the figure at the right to determine if each set of points are collinear

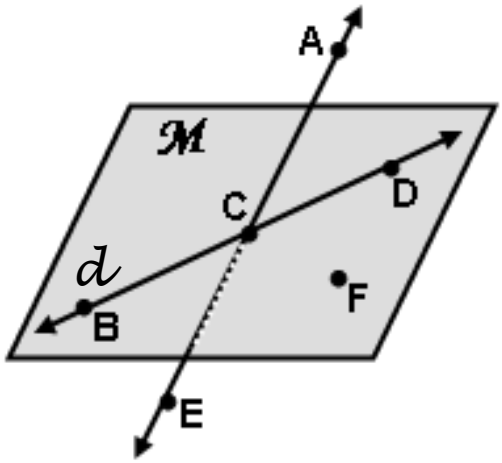
11. A, D, E YES or NO

12. B, C, D YES or NO

13. B, C, F YES or NO

14. A, E, C YES or NO

15. F, B, D YES or NO



Using the same figure above, answer each of the following

16. Name plane $\mathcal{M}$ another way _____

17. Name line d another way _____

18. Name all segments shown with endpoint C _____

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Notes

Term	Description	Notation	Visual Representation
Point			
Line			
Plane			
Collinear			
Non-Collinear			

Example 1

Name a line that contains point B.

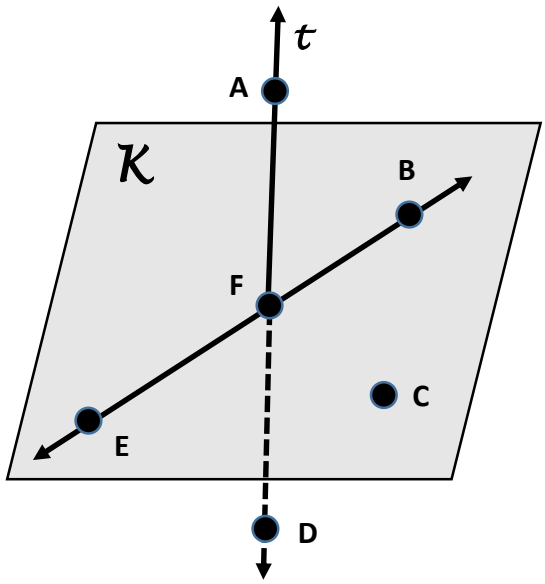
Name a line passing through point D.

Name a plane containing points C, B, and F.

Name line BE another way.

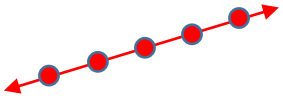
Name plane $\mathcal{K}$ another way.

Name line t another way.



Points, Lines, and Planes

Notes

Term	Description	Notation	Visual Representation
Point	A point in space that has a specific location but no size.	A	
Line	Series of points that extend in opposite directions without end.	$\overleftrightarrow{AB}$	
Plane	An infinite set of points on a flat surface that extends in all directions.	Plane ABC	
Collinear	Points that lie on the same line.		
Non-Collinear	Points that do not lie on the same line		

Example 1

Name a line that contains point B.
Line BF

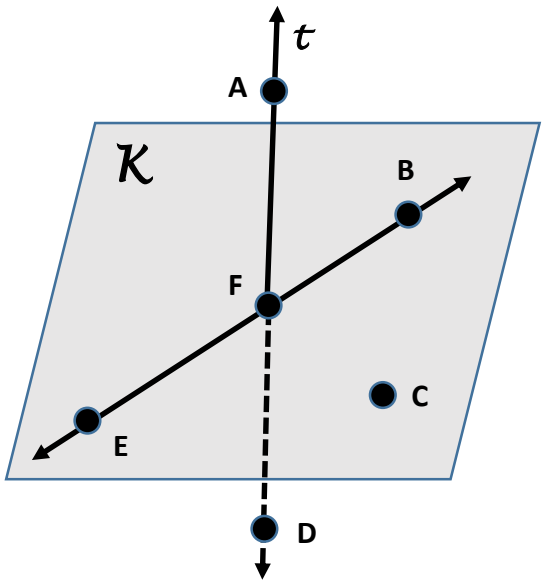
Name a line passing through point D.
Line FD

Name a plane containing points C, B, and F.
Plane CBF

Name line BE another way.
Line FB

Name plane $\mathcal{K}$ another way.
Plane ECB

Name line t another way.
Line DA



Points, Lines, and Planes

Answer Sheet

1. Line AF
2. Line ED
3. Plane R
4. Plane CEB
5. Line FA
6. Plane BDF
7. Sketch
8. Sketch
9. Sketch
10. Sketch
11. No
12. Yes
13. No
14. Yes
15. No
16. Plane BFD
17. Line BC
18. Segments CB, CE, CD, CA