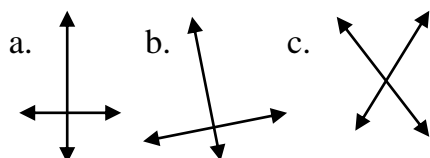


4.G.A.1 Line Relationships and Angles Formed

4.G.A.1: Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.

Give what is asked in each item and then write your answers on the space provided.

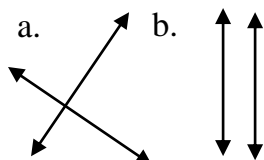
1. How many obtuse angles are formed by the intersection of the lines shown below?



Answers:

a. ____ b. ____ c. ____

2. Name a line relationship you see in each figure. Write in terms of appropriate symbol for parallel and perpendicular.



Answers:

a. _____
b. _____

3. Write True if the statement is true and write False if otherwise.

- a. A pair of parallel lines intersect at 2 points in a plane. _____
- b. If three lines are parallel, then they must be coplanar. _____
- c. Four lines in a plane can never intersect at a common point. _____
- d. If three lines are co-planar, then they must be parallel to each other. _____

4. Identify the line relationships meant by the symbols below.

a. \parallel b. \perp

Answers:

a. ____ b. ____ c. ____ d. ____

5. Draw the following lines based on the given descriptions.

a. Two lines ST and UV are \perp to each other and the line WX is parallel to UV.

Answer:

b. The lines GH, IJ, and KL are \parallel to each other and the line YZ is \perp to all other three lines.

Answer:

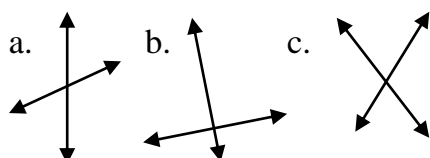
4.G.A.1 Line Relationships and Angles Formed

Answer Key

4.G.A.1: Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.

Give what is asked in each item and then write your answers on the space provided.

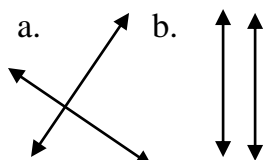
1. How many obtuse angles are formed by the intersection of the lines shown below?



Answers:

a. 2 b. 0 c. 2

2. Name a line relationship you see in each figure. Write in terms of appropriate symbol for parallel and perpendicular.



Answers:

a. perpendicular lines (\perp)
b. parallel lines (\parallel)

3. Write True if the statement is true and write False if otherwise.

- | | |
|--|--------------|
| a. A pair of parallel lines intersect at 2 points in a plane. | <u>False</u> |
| b. If three lines are parallel, then they must be coplanar. | <u>True</u> |
| c. Four lines in a plane can never intersect at a common point. | <u>False</u> |
| d. If three lines are co-planar, then they must be parallel to each other. | <u>False</u> |

4. Identify the line relationships meant by the symbols below.

a. \parallel b. \perp

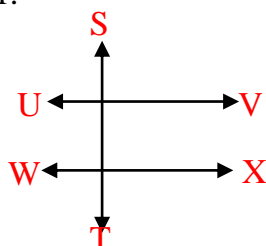
Answers:

a. parallel lines
b. perpendicular lines

5. Draw the following lines based on the given descriptions.

a. Two lines ST and UV are \perp to each other and the line WX is parallel to UV.

Answer:



b. The lines GH, IJ, and KL are \parallel to each other and the line YZ is \perp to all other three lines.

Answer:

