

Objective:

Do Now: a. Using the figure at the right, choose *parallel*, *perpendicular*, *skew*, or *oblique*:

AD and DH _____

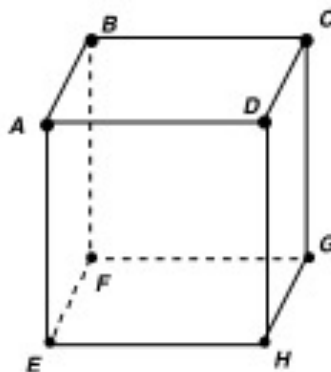
DC and GH _____

AB and DH _____

AH and FG _____

BD and DC _____

FE and CG _____



b. Label each figure as ray, line, or segment. Then name the figure using two letters and the proper notation.







Guided Practice: Lines

Slope-Intercept Form:

Point-Slope Form:

To find the slope of the line that connects two points (x_1, y_1) and (x_2, y_2) , use the formula:

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

Lines that are parallel have _____.

Lines that are perpendicular have _____.

1. The lines $y = \frac{2}{3}x - 5$ and $y = \frac{2}{3}x + 18$ are _____.

2. The lines $y = \frac{5}{7}x$ and $y = -\frac{7}{5}x + 4$ are _____.

3. Write the equation of a line that is parallel to $y = 3x + 4$;

4. Write the equation of a line that is perpendicular to $y = 3x + 4$;

5. Graph the lines below. Then decide if they are parallel, perpendicular, coincident, or intersecting.

$$y = 3x + 2$$

$$9x - 3y = -6$$

