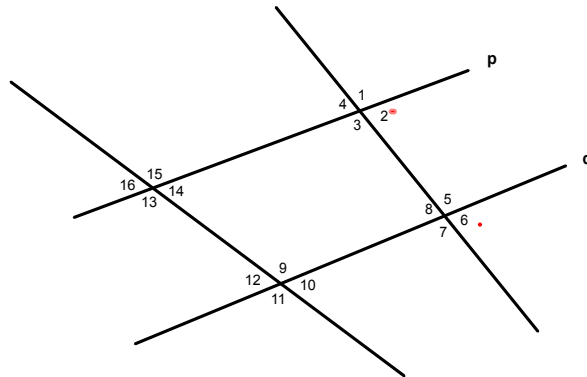


Geometry Chapter 3 Review



Identify each pair of angles as alternate interior, alternate exterior, corresponding, or consecutive interior angles if line p is parallel to line q.

- 1.) $\angle 15$ and $\angle 11$ *Alt. exterior* 2.) $\angle 10$ and $\angle 8$ *Alt. interior* 3.) $\angle 2$ and $\angle 6$ *corresponding*

2.) Determine whether \overline{AB} and \overline{CD} are parallel, perpendicular, or neither.

a. A(-4, 1), B(3, -1), C(2, 2), D(0, 9)

$$m_{\overline{AB}} = \frac{\Delta y}{\Delta x} = \frac{-1-1}{3-(-4)} = \frac{-2}{7}$$

$$m_{\overline{CD}} = \frac{\Delta y}{\Delta x} = \frac{9-2}{0-2} = \frac{7}{-2}$$

neither

b. A(1, -3), B(4, 5), C(1, -1), D(-7, 2)

$$m_{\overline{AB}} = \frac{5-(-3)}{4-1} = \frac{8}{3}$$

$$m_{\overline{CD}} = \frac{2-(-1)}{-7-1} = \frac{3}{-8}$$

perpendicular

$\angle 4 \cong \angle 5$ Alt. ext.
 $\angle 1 \cong \angle 8$ Alt. ext.
 $\angle 2 \cong \angle 7$ Alt. int.
 $\angle 3 \cong \angle 6$ Alt. int.
 $\angle 2 \cong \angle 4$ corresp.
 $\angle 1 \cong \angle 3$ corresp.
 $\angle 1 \cong \angle 6$ vertical

3.) Which pairs of angles are congruent if $g \parallel h$?

4.) Write an equation in slope intercept form for the line that satisfies the given conditions.

$m = 4$, y-intercept = -3

$y = mx + b$

$y = 4x + -3$

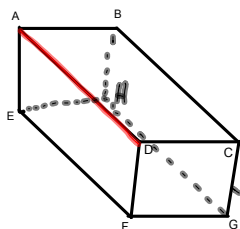
5.) Write an equation in point-slope form for the line that satisfies the given conditions.

slope = $\frac{1}{3}$, contains $(2, -5)$

$$y - y_1 = m(x - x_1)$$

$$y - (-5) = \frac{1}{3}(x - 2)$$

$$y + 5 = \frac{1}{3}(x - 2)$$



6.) Identify the intersection of plane ABC and the plane ~~ABC~~

\overline{DC}

7.) Name a segment skew to \overline{AD} .

\overline{EH} , \overline{FG} , \overline{CG} , \overline{BH}

8.) Mrs. Belmore writes computer manuals. She charges \$75 to review writing specifications plus \$40 per hour h to write the manual. Which equation represents the total fee F that Mrs. Belmore earns for writing each computer manual?

a. $F = 40(h + 75)$

b. $F = 40h + 75$

c. $F + 75 = 40h$

d. $40F = h + 75$