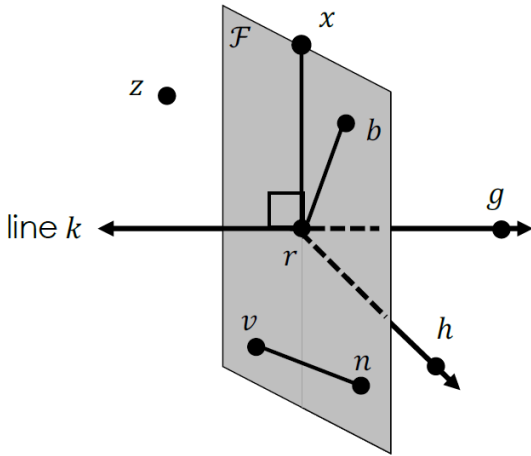


**UNIT 1 TEST REVIEW** SHOW ALL WORK ON SEPARATE SHEET



- 1) Select all that apply to the diagram on the left:
- Line k is perpendicular to  $\overline{rb}$
  - The intersection of line k and plane F is  $\overline{rx}$
  - $\overline{rh}$  and  $\overline{rg}$  are opposite rays
  - $\overline{rh}$  lies in plane F
  - x, b, v and n are coplanar
  - Another name for line k is  $\overline{rg}$
  - Points z, x and b are coplanar in Plane F

2) Match the equation on the left to the line description on the right.

- A.)  $y = 1$
- B.)  $y = -\frac{1}{3}x + 5$
- C.)  $-x + 3y = 12$
- D.)  $x - 2y = -8$

1. A line perpendicular to $x = 5$
2. A line parallel to $y = \frac{1}{3}x + 2$
3. A line parallel to $-4x + 8y = 9$
4. A line perpendicular to $9x - 3y = 18$

- 3) Write the equation of a line parallel to  $2x - 2y = 3$  and passes through (7,4).
- 4) Write the equation of a line perpendicular to  $-6y - 4x = 18$  and passes through (2,6).
- 5) Identify if the following two lines are parallel, perpendicular or neither:  
 Line r:  $2x - 8y = 16$  and Line o:  $4y = x - 9$
- 6) SKETCHING PRACTICE: Draw plane B with line s intersecting it at point M. On plane B there are two lines that are perpendicular, name them line f and line p. There is a third line on plane B called  $\overline{AK}$  and it is perpendicular to line s at the intersection point M.
- 7) What are the undefined terms of geometry?
- 8) Find the length of the segment connecting (-3, 7) and (5, -1). Round to the nearest tenth.
- 9) What is distance between R(10,2) and S(-3,8)? Round to the nearest tenth.
- 10) Find the perimeter of ABCD. A(2,8), B(2,5), C(6,5), D(8,10). Round to the nearest tenth.
- 11) Point D partitions segment  $\overline{GK}$  in the ratio GD:DK = 3:4. Point G(1,9) and K(8, -5), find the coordinates of point D.
- 12) Point B lies on segment  $\overline{CA}$  and partitions in a ratio of 5:1. If C(-7, -3) and B(5, -7), what are the coordinates of A?
- 13) Find the midpoint of  $\overline{AF}$  if A is at the origin and F (9,6).
- 14) Is (-2,1) the midpoint of (-5,4) and (1, -1)?
- 15) The diameter of a circle has endpoints (8,7) and (-2,3). What are the coordinates of the center of the circle?
- 16) If B is the midpoint of  $\overline{AC}$ , solve for x.

17) If  $AB = 4x + 9$ ,  $BC = 5x + 2$ , and  $AC = 56$ , solve for x, AB, and BC.

