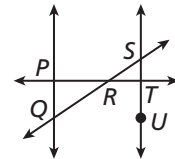


39. Which of the following is a set of noncollinear points?

- Ⓐ P, R, T Ⓒ P, Q, R
 Ⓑ Q, R, S Ⓓ S, T, U



40. What is the greatest number of intersection points four coplanar lines can have?

- Ⓕ 6 Ⓗ 2
 Ⓖ 4 Ⓙ 0

41. Two flat walls meet in the corner of a classroom. Which postulate best describes this situation?

- Ⓐ Through any three noncollinear points there is exactly one plane.
 Ⓑ If two points lie in a plane, then the line containing them lies in the plane.
 Ⓒ If two lines intersect, then they intersect in exactly one point.
 Ⓓ If two planes intersect, then they intersect in exactly one line.

42. **Gridded Response** What is the greatest number of planes determined by four noncollinear points?

CHALLENGE AND EXTEND

Use the table for Exercises 43–45.

Figure			
Number of Points	2	3	4
Maximum Number of Segments	1	3	

43. What is the maximum number of segments determined by 4 points?
44. **Multi-Step** Extend the table. What is the maximum number of segments determined by 10 points?
45. Write a formula for the maximum number of segments determined by n points.
46. **Critical Thinking** Explain how rescue teams could use two of the postulates from this lesson to locate a distress signal.

SPIRAL REVIEW

47. The combined age of a mother and her twin daughters is 58 years. The mother was 25 years old when the twins were born. Write and solve an equation to find the age of each of the three people. (*Previous course*)

Determine whether each set of ordered pairs is a function. (*Previous course*)

48. $\{(0, 1), (1, -1), (5, -1), (-1, 2)\}$ 49. $\{(3, 8), (10, 6), (9, 8), (10, -6)\}$

Find the mean, median, and mode for each set of data. (*Previous course*)

50. 0, 6, 1, 3, 5, 2, 7, 10 51. 0.47, 0.44, 0.4, 0.46, 0.44