Use this diagram for Questions 1 and 2.
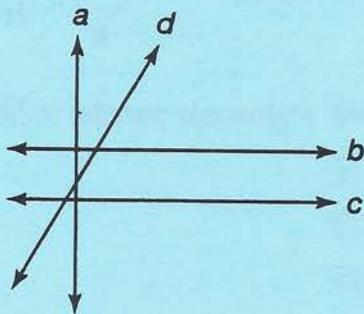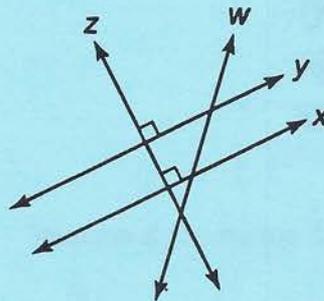

Use this diagram for Questions 3 and 4.

1. Which two lines are parallel?

   A   *a* and *b*

   B   *a* and *c*

   C   *b* and *c*

   D   *b* and *d*

2. Which two lines are perpendicular?

   A   *a* and *b*

   B   *a* and *d*

   C   *b* and *c*

   D   *c* and *d*

3. Which two lines are perpendicular?

   A   *w* and *y*

   B   *y* and *x*

   C   *w* and *z*

   D   *x* and *z*

4. Which two lines are parallel?

   A   *w* and *y*

   B   *y* and *x*

   C   *w* and *z*

   D   *x* and *z*

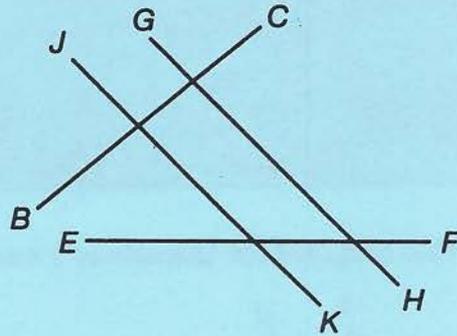**5.** Which segment is perpendicular to $\overline{MN}$?
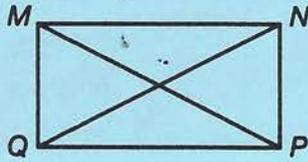
A $\overline{NP}$

B $\overline{PQ}$

C $\overline{QN}$

D $\overline{MP}$

6. Which statement is correct?
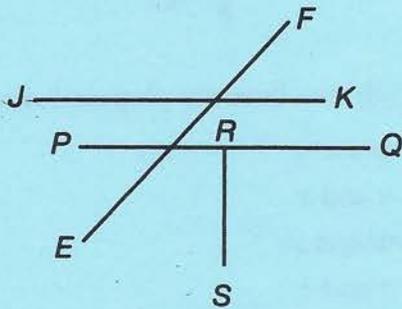
A $\overline{PQ}$ is parallel to $\overline{RS}$.

B $\overline{PQ}$ is perpendicular to $\overline{RS}$.

C $\overline{PQ}$ is perpendicular to $\overline{EF}$.

D $\overline{EF}$ is parallel to $\overline{RS}$.
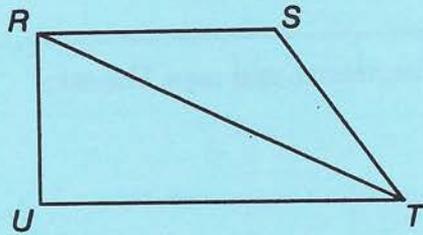
Use this diagram for Questions 7 and 8.

7. Which segment is parallel to $\overline{JK}$?

A $\overline{BC}$

B $\overline{EF}$

C $\overline{FE}$

D $\overline{GH}$

8. Which statement is correct?

A $\overline{BC}$ is parallel too $\overline{EF}$.

B $\overline{BC}$ is perpendicular to $\overline{GH}$.

C $\overline{BC}$ is parallel to $\overline{JK}$.

D $\overline{JK}$ is parallel to $\overline{EF}$.

Use this diagram for Questions 9 and 10.

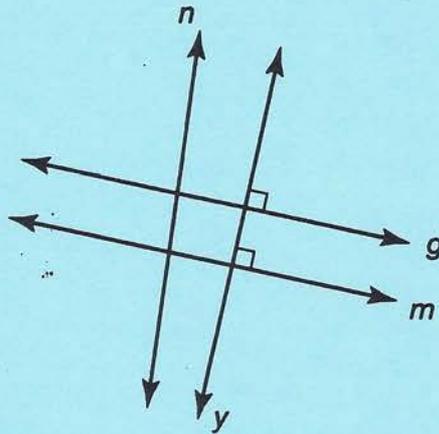9. Which segment is parallel to $\overline{RS}$?

   A $\overline{RU}$

   B $\overline{ST}$

   C $\overline{UT}$

   D $\overline{RT}$

10. Which statement is correct?

   A $\overline{RU}$ is parallel to $\overline{RS}$.

   B $\overline{RS}$ is parallel to $\overline{ST}$.

   C $\overline{RS}$ is perpendicular to $\overline{UT}$.

   D $\overline{RU}$ is perpendicular to $\overline{UT}$.

Brief Constructed Response

11. Martha sees these lines on a map.

A. Identify a pair of perpendicular lines.

B. Use what you know about perpendicular lines to explain why your answer to Part A is correct. Use words and / or pictures in your explanation.