

### Assignment 11 Lesson 2.4

Which postulate can be represented by the given if-then statement?

1. If any two points are considered, then there is exactly one line through the points.
2. If any three noncollinear points are considered, then there is exactly one plane through all three points.
3. If a plane is considered, then the plane contains at least three noncollinear points.
4. If a line is considered, then the line contains at least two points.

State the postulate illustrated by the diagram.

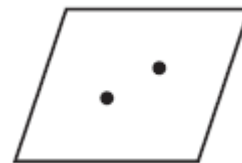
5. If



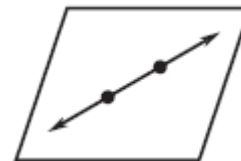
then



6. If



then



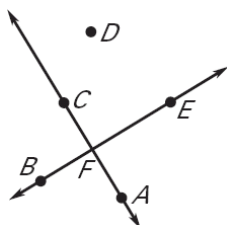
Use the diagram to write an example of the postulate.



7. Postulate 5

8. Postulate 6

Can the statement be assumed to be true from the diagram?

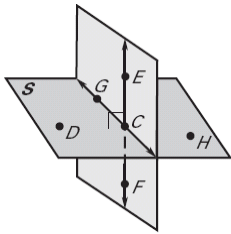


7.  $B, C,$  and  $D$  are collinear

10.  $\overleftrightarrow{AC} \perp \overleftrightarrow{BE}$

11.  $\angle CFE$  and  $\angle AFE$  are a linear pair.

Can the statement be assumed to be true from the diagram? Explain.



12.  $\overleftrightarrow{EF} \perp \text{plane } S$

13.  $\overleftrightarrow{EF} \perp \overleftrightarrow{CG}$

14.  $D$ ,  $C$ , and  $H$  are collinear.

15.  $E$ ,  $C$ , and  $F$  are collinear.

16.  $\overleftrightarrow{EF}$  intersects plane  $S$  at point  $C$

17.  $\overleftrightarrow{EF} \perp \overleftrightarrow{DH}$

18.  $\overleftrightarrow{EF} \perp \overleftrightarrow{CH}$

19.  $\overleftrightarrow{CG} \perp \overleftrightarrow{CD}$