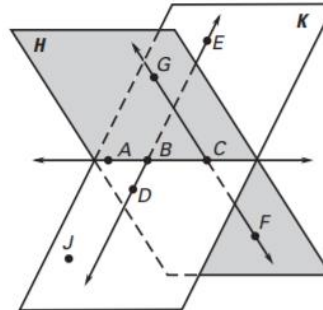


Geometry Ch 2.6 Worksheet

Name: _____

In Exercises 12–19, use the diagram to determine if the statement is true or false.

12. Points $A, B, D,$ and J are coplanar.
13. $\angle EBA$ is a right angle.
14. Points $E, G,$ and A are collinear.
15. $\overrightarrow{FG} \perp$ plane H
16. $\angle ABD$ and $\angle EBC$ are vertical angles.
17. Planes H and K intersect at \overleftrightarrow{AB} .
18. \overrightarrow{FG} and \overrightarrow{DE} intersect.
19. $\angle GCA$ and $\angle CBD$ are congruent angles.



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Complete the logical argument by giving a reason for each step.

1. $AB = BC$
 $AC = AB + BC$
 $AC = AB + AB$
 $AC = 2(AB)$

- Given
- a. $?$
 - b. $?$
 - c. $?$



In Exercises 1–4, complete the proof.

1. GIVEN: $HI = 9, IJ = 9, \overline{IJ} \cong \overline{JH}$

PROVE: $\overline{HI} \cong \overline{JH}$

Statements	Reasons
1. $HI = 9$	1. $?$
2. $IJ = 9$	2. $?$
3. $HI = IJ$	3. $?$
4. $?$	4. Definition of congruent segments
5. $\overline{IJ} \cong \overline{JH}$	5. $?$
6. $\overline{HI} \cong \overline{JH}$	6. $?$

