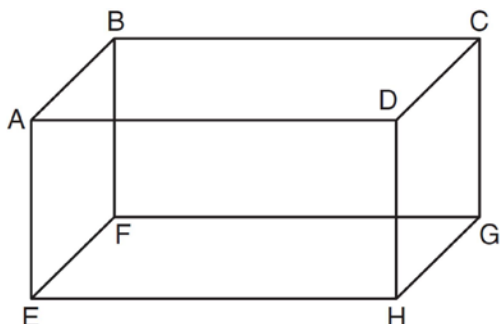


G.G.10: Solids: Know and apply that the lateral edges of a prism are congruent and parallel

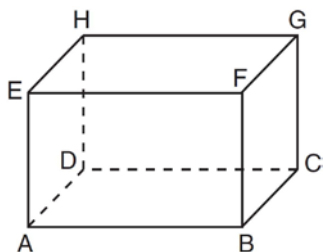
- 1 The diagram below shows a rectangular prism.



Which pair of edges are segments of lines that are coplanar?

- 1) \overline{AB} and \overline{DH}
- 2) \overline{AE} and \overline{DC}
- 3) \overline{BC} and \overline{EH}
- 4) \overline{CG} and \overline{EF}

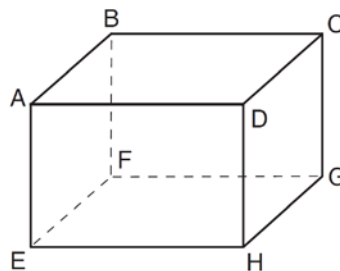
- 2 A right rectangular prism is shown in the diagram below.



Which line segments are coplanar?

- 1) \overline{EF} and \overline{BC}
- 2) \overline{HD} and \overline{FG}
- 3) \overline{GH} and \overline{FB}
- 4) \overline{EA} and \overline{GC}

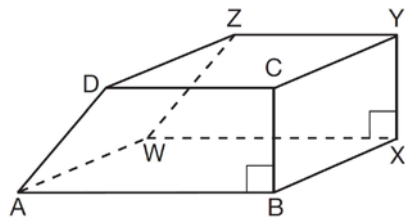
- 3 A rectangular right prism is shown in the diagram below.



Which pair of edges are *not* coplanar?

- 1) \overline{BF} and \overline{CG}
- 2) \overline{BF} and \overline{DH}
- 3) \overline{EF} and \overline{CD}
- 4) \overline{EF} and \overline{BC}

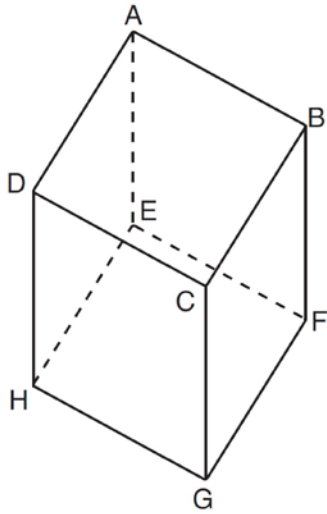
- 4 The bases of a prism are right trapezoids, as shown in the diagram below.



Which two edges do *not* lie in the same plane?

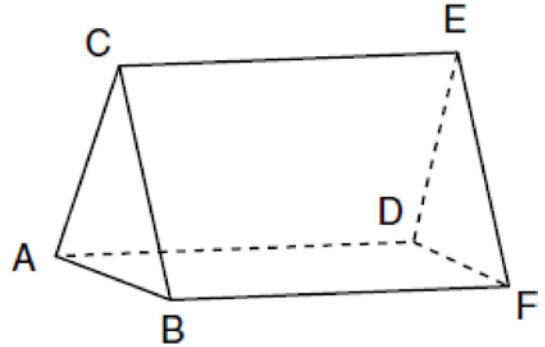
- 1) \overline{BC} and \overline{WZ}
- 2) \overline{AW} and \overline{CY}
- 3) \overline{DC} and \overline{WX}
- 4) \overline{BX} and \overline{AB}

- 5 Which pair of edges is *not* coplanar in the cube shown below?



- 1) \overline{EH} and \overline{CD}
- 2) \overline{AD} and \overline{FG}
- 3) \overline{DH} and \overline{AE}
- 4) \overline{AB} and \overline{EF}

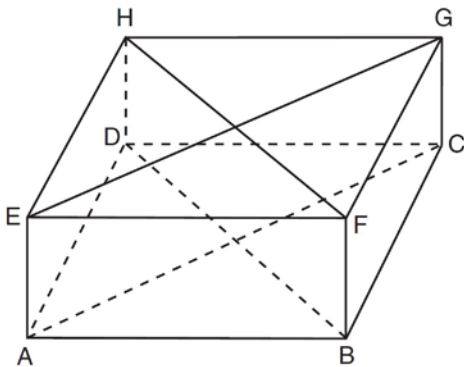
- 7 The figure in the diagram below is a triangular prism.



Which statement must be true?

- 1) $\overline{DE} \cong \overline{AB}$
- 2) $\overline{AD} \cong \overline{BC}$
- 3) $\overline{AD} \parallel \overline{CE}$
- 4) $\overline{DE} \parallel \overline{BC}$

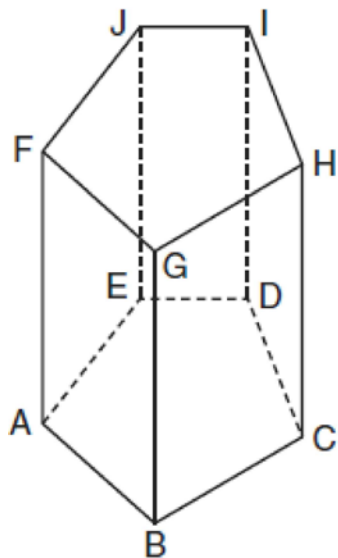
- 6 A rectangular prism is shown in the diagram below.



Which pair of line segments would always be both congruent and parallel?

- 1) \overline{AC} and \overline{FB}
- 2) \overline{FB} and \overline{DB}
- 3) \overline{HF} and \overline{AC}
- 4) \overline{DB} and \overline{HF}

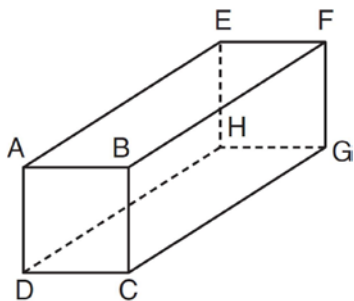
- 8 The diagram below shows a right pentagonal prism.



Which statement is always true?

- 1) $\overline{BC} \parallel \overline{ED}$
- 2) $\overline{FG} \parallel \overline{CD}$
- 3) $\overline{FJ} \parallel \overline{IH}$
- 4) $\overline{GB} \parallel \overline{HC}$

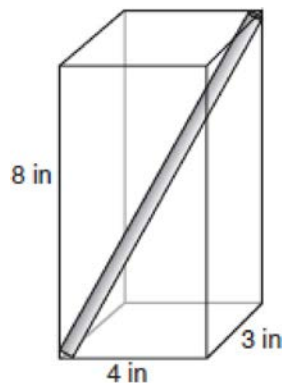
- 9 The diagram below represents a rectangular solid.



Which statement must be true?

- 1) \overline{EH} and \overline{BC} are coplanar
- 2) \overline{FG} and \overline{AB} are coplanar
- 3) \overline{EH} and \overline{AD} are skew
- 4) \overline{FG} and \overline{CG} are skew

- 10 A straw is placed into a rectangular box that is 3 inches by 4 inches by 8 inches, as shown in the accompanying diagram. If the straw fits exactly into the box diagonally from the bottom left front corner to the top right back corner, how long is the straw, to the nearest tenth of an inch?



- 11 The bases of a right triangular prism are $\triangle ABC$ and $\triangle DEF$. Angles A and D are right angles, $AB = 6$, $AC = 8$, and $AD = 12$. What is the length of edge BE ?
- 1) 10
 - 2) 12
 - 3) 14
 - 4) 16

G.G.10: Solids: Know and apply that the lateral edges of a prism are congruent and parallel
Answer Section

- | | | |
|----|--------------|-----------------|
| 1 | ANS: 3 | REF: 011105ge |
| 2 | ANS: 4 | REF: 061503ge |
| 3 | ANS: 4 | REF: 011406ge |
| 4 | ANS: 1 | REF: 011526ge |
| 5 | ANS: 1 | REF: 0815108ge |
| 6 | ANS: 4 | REF: 081401ge |
| 7 | ANS: 3 | REF: fall0808ge |
| 8 | ANS: 4 | REF: 061003ge |
| 9 | ANS: 1 | REF: 011221ge |
| 10 | ANS:
9.4 | |
| | REF: 060334a | |
| 11 | ANS: 2 | REF: 081311ge |