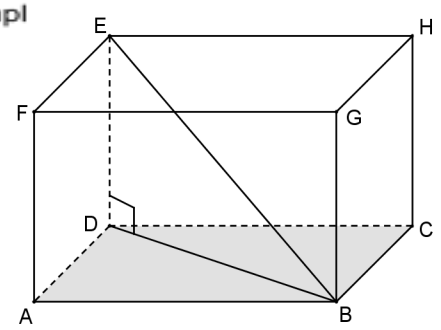
Worksheet 1 – Projections

Name: _____( ) Class: ___ Date:

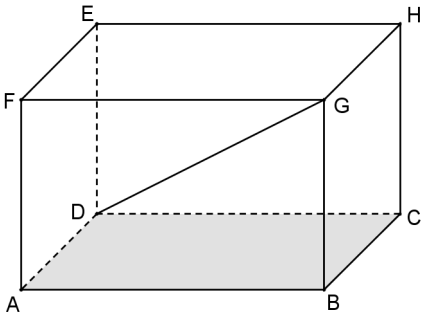
In each of the following figures, use the concept of a line perpendicular to a plane to name the projection of the given segment on the shaded plane. Also draw the projection and mark the right angle in the figure, as shown in the example.

Example



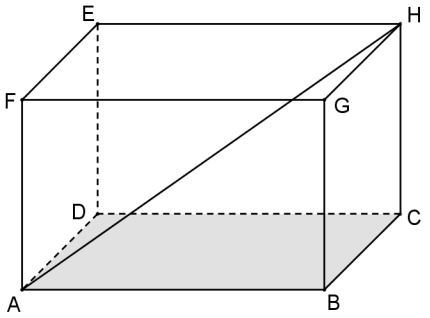
Since ED is perpendicular to plane ABCD, the projection of EB on plane ABCD is DB .

1



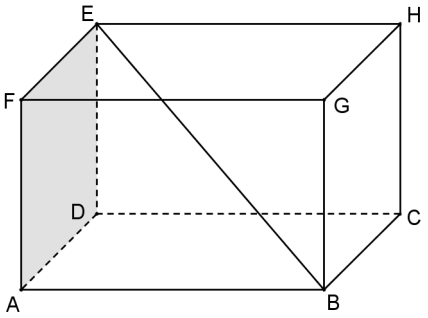
Since ___ is perpendicular to plane ABCD, the projection of GD on plane ABCD is ___ .

2.



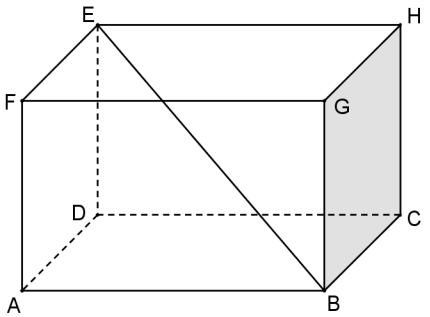
Since ___ is perpendicular to plane ABCD, the projection of HA on plane ABCD is ___ .

3.



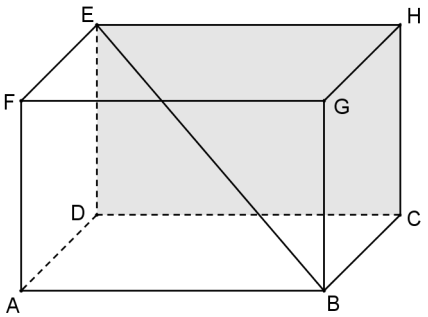
Since ___ is perpendicular to plane ADEF, the projection of EB on plane ADEF is ___ .

4.



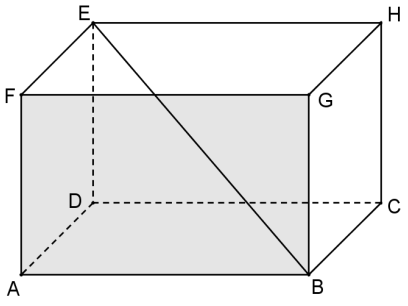
Since ___ is perpendicular to plane BCHG, the projection of EB on plane BCHG is ___ .

5.



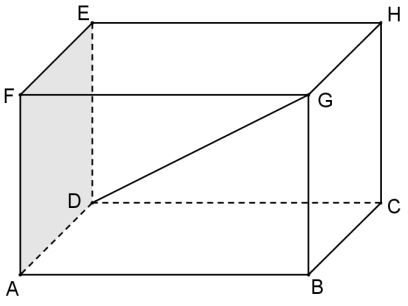
Since ___ is perpendicular to plane CDEH, the projection of EB on plane CDEH is ___ .

6.



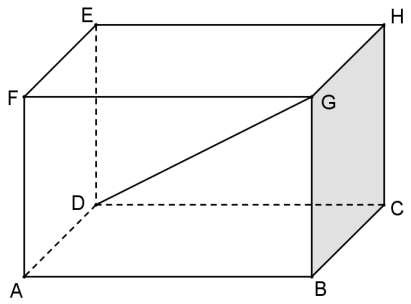
Since ___ is perpendicular to plane ABGF, the projection of EB on plane ABGF is ___ .

7.



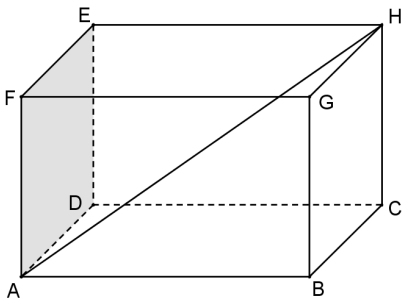
Since ___ is perpendicular to plane ADEF, the projection of GD on plane ADEF is ___ .

8.



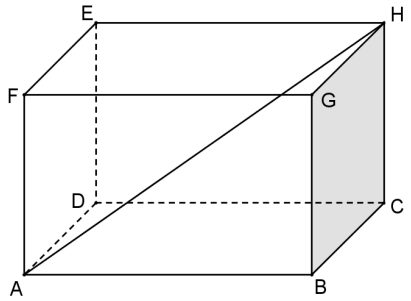
Since ___ is perpendicular to plane BCHG, the projection of GD on plane BCHG is ___ .

9.



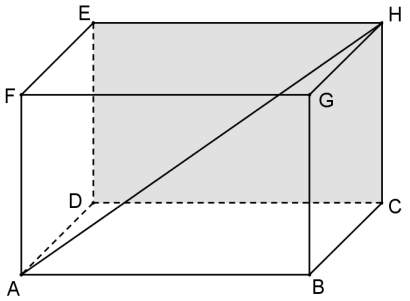
Since ___ is perpendicular to plane ADEF, the projection of HA on plane ADEF is ___ .

10.



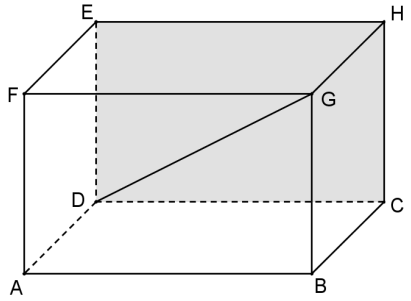
Since ___ is perpendicular to plane BCHG, the projection of HA on plane BCHG is ___ .

11.



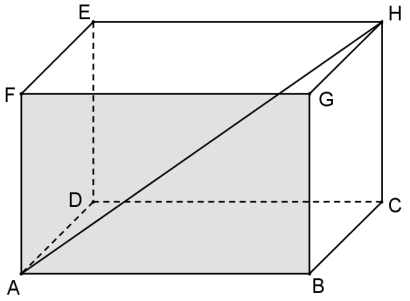
Since ___ is perpendicular to plane CDEH, the projection of HA on plane CDEH is ___ .

12.



Since ___ is perpendicular to plane CDEH, the projection of GD on plane CDEH is ___ .

13



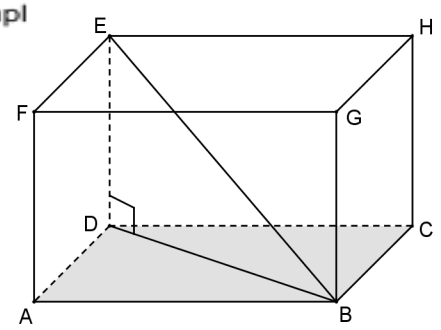
Since ___ is perpendicular to plane ABGF, the projection of HA on plane ABGF is ___ .

Worksheet 1 – Projections (Answer)

Name: _____( ) Class: ___ Date:

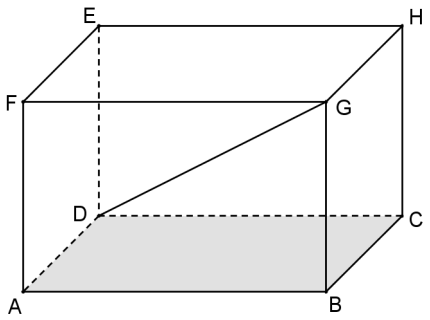
In each of the following figures, use the concept of a line perpendicular to a plane to name the projection of the given segment on the shaded plane. Also draw the projection and mark the right angle in the figure, as shown in the example.

Example



Since ED is perpendicular to plane ABCD, the projection of EB on plane ABCD is DB .

1



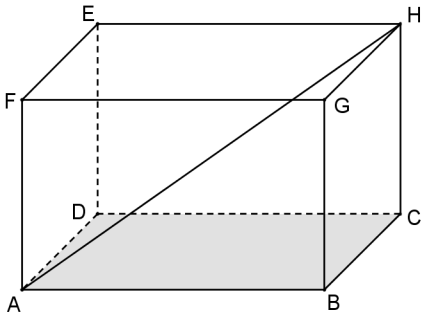
Since ___ is perpendicular to plane ABCD, the projection of GD on plane ABCD is ___ .

BG

BD

G

2.

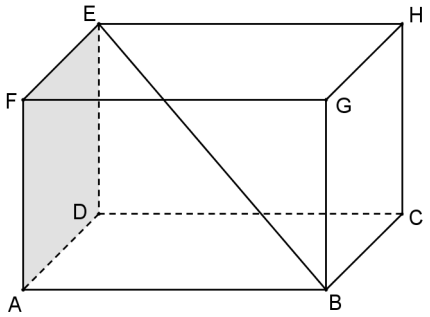


Since ___ is perpendicular to plane ABCD, the projection of HA on plane ABCD is ___ .

CH

AC

3.



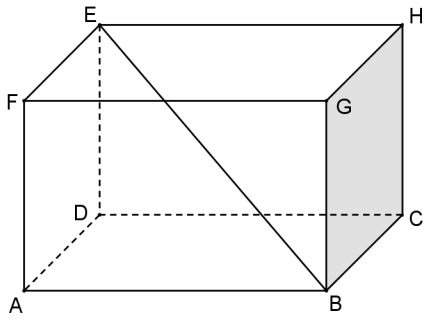
Since ___ is perpendicular to plane ADEF, the projection of EB on plane ADEF is ___ .

AB

AE

CE

4.

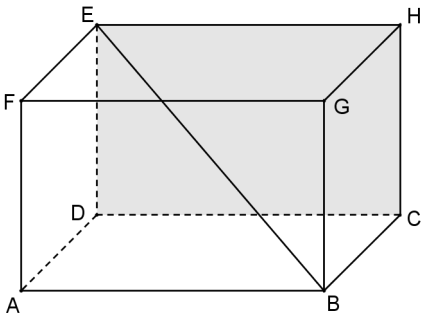


Since ___ is perpendicular to plane BCHG, the projection of EB on plane BCHG is ___ .

EH

BH

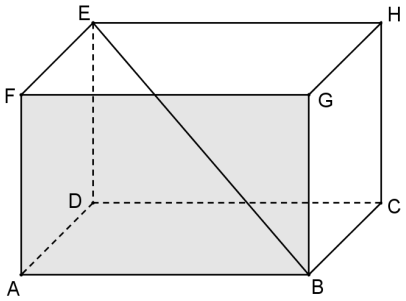
5.



Since ___ is perpendicular to plane CDEH, the projection of EB on plane CDEH is ___ .

BC

6.

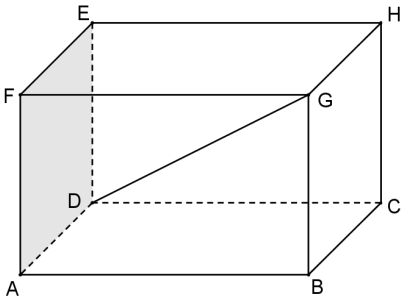


Since ___ is perpendicular to plane ABGF, the projection of EB on plane ABGF is ___ .

EF

BF

7.

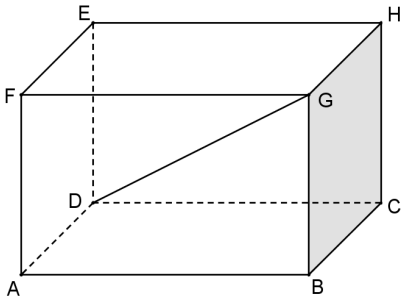


Since ___ is perpendicular to plane ADEF, the projection of GD on plane ADEF is ___ .

FG

DF

8.

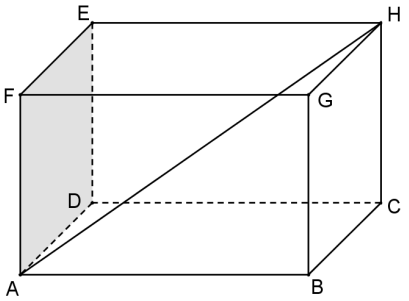


Since ___ is perpendicular to plane BCHG, the projection of GD on plane BCHG is ___ .

CD

CG

9.

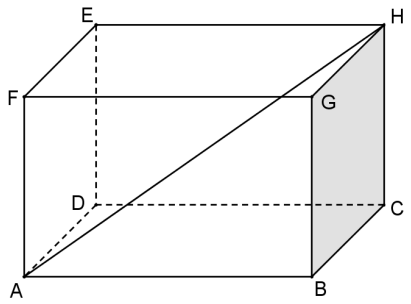


Since ___ is perpendicular to plane ADEF, the projection of HA on plane ADEF is ___ .

EH

AE

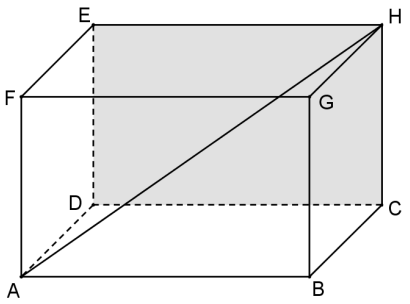
10.



Since AB is perpendicular to plane BCHG, the projection of HA on plane BCHG is ___ .

BH

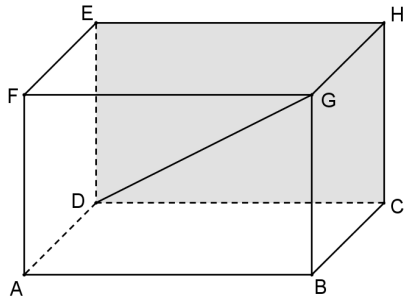
11.



Since AD is perpendicular to plane CDEH, the projection of HA on plane CDEH is ___ .

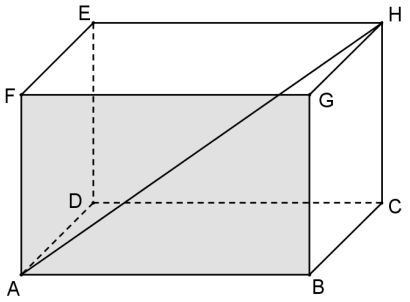
DH

12.



Since GH is perpendicular to plane CDEH, the projection of GD on plane CDEH is ___ .

13



Since GH is perpendicular to plane ABGF, the projection of HA on plane ABGF is ___ .

AG