

Name \_\_\_\_\_

SID # \_\_\_\_\_

Engineering 25  
Fall Semester 2014  
Midterm Exam

90 minutes  
Closed Book Exam

Problem 1 \_\_\_\_\_ /40

Problem 2 \_\_\_\_\_ /30

Problem 3 \_\_\_\_\_ /30

Total Score \_\_\_\_\_ /100

**Problem #1** 40 points

The pictorials of two objects are shown in the figure below.

- a. Sketch an isometric view of the result when Object A is rotated around the y-axis by  $+90^\circ$ .

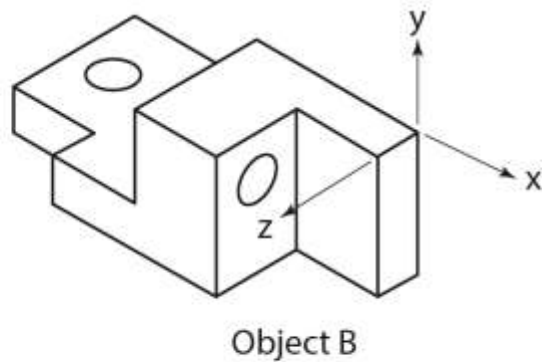
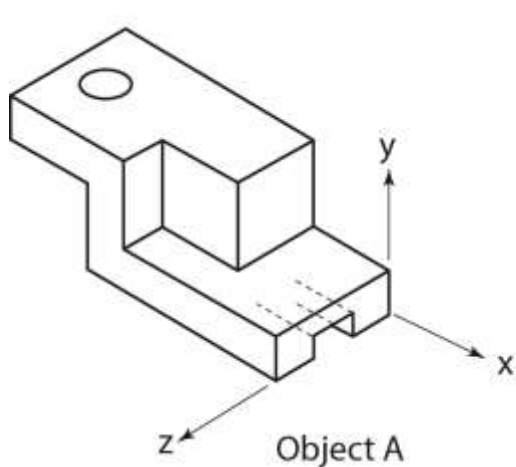


- b. Sketch an isometric view of the result when Object B is rotated around the x-axis by  $-90^\circ$ , and then about the y-axis by  $+90^\circ$ .

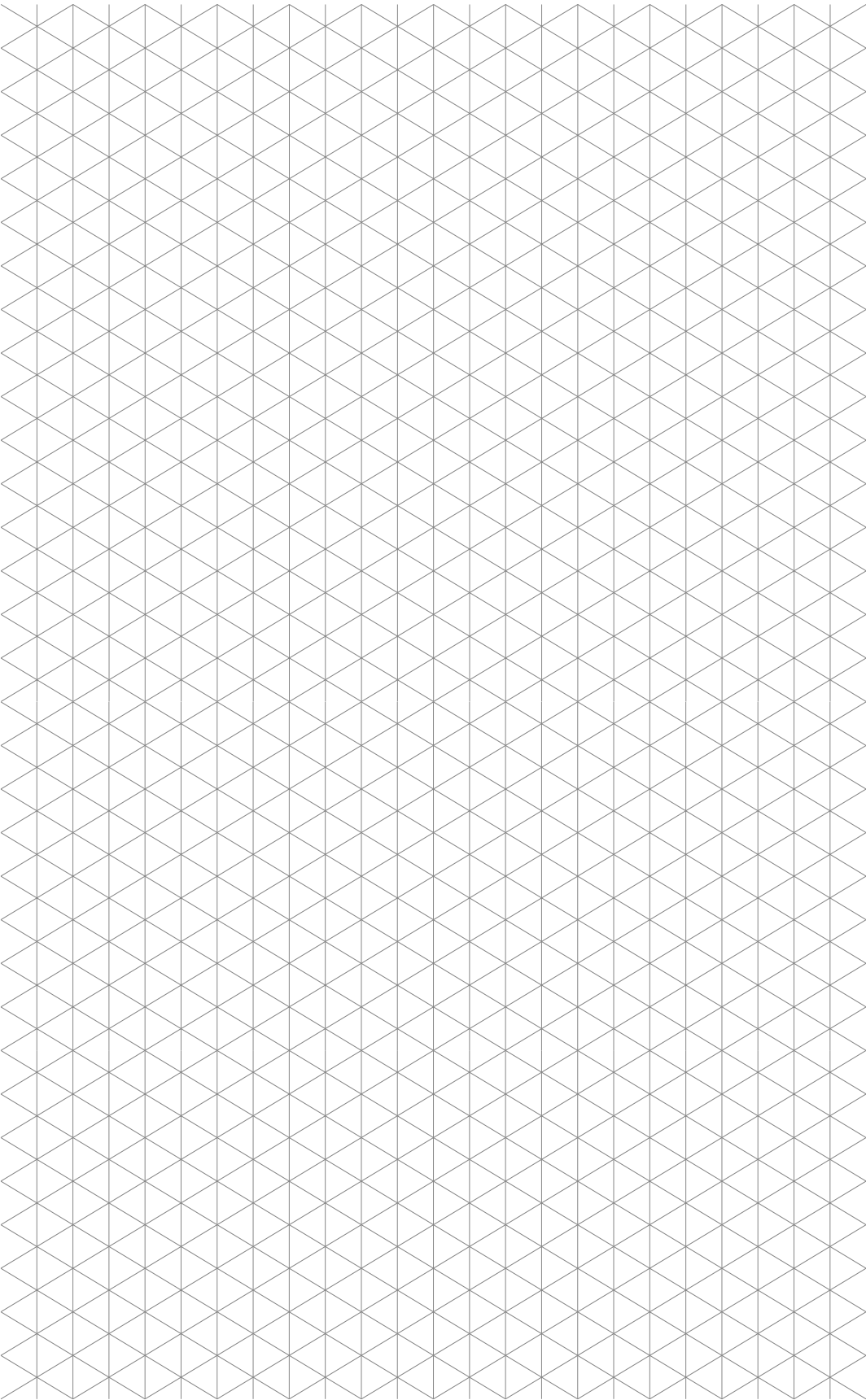


- c. Sketch an isometric view of the resulting interference between A and B after the rotations in (a) and (b) have been performed.
- d. Sketch the reflection of the interference in (c) using the x-y plane as the mirror.

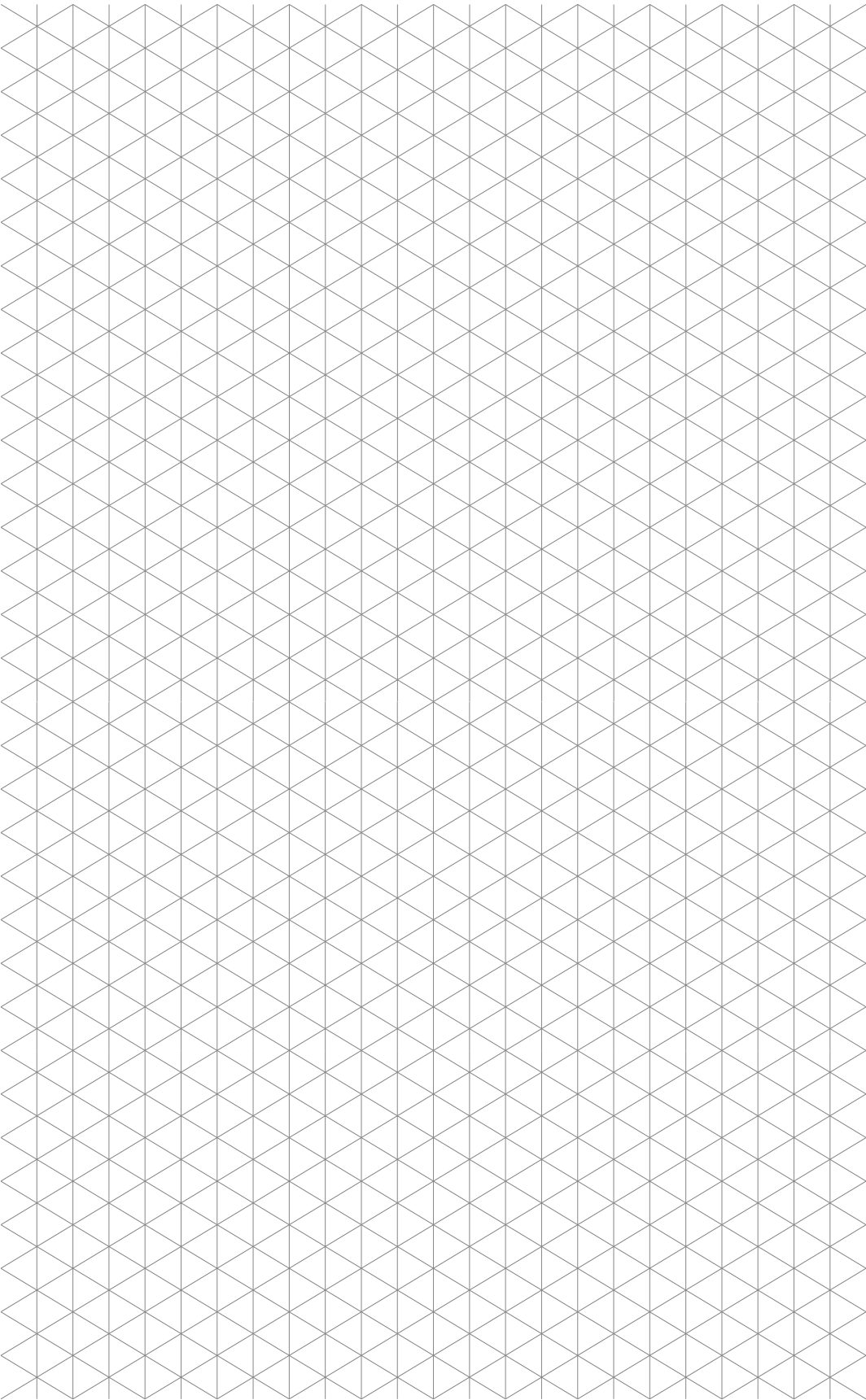
The orientations of the x-y-z axes are to remain the same in all views.



For all pictorial sketches on this exam, shading of surfaces is recommended, but not required.



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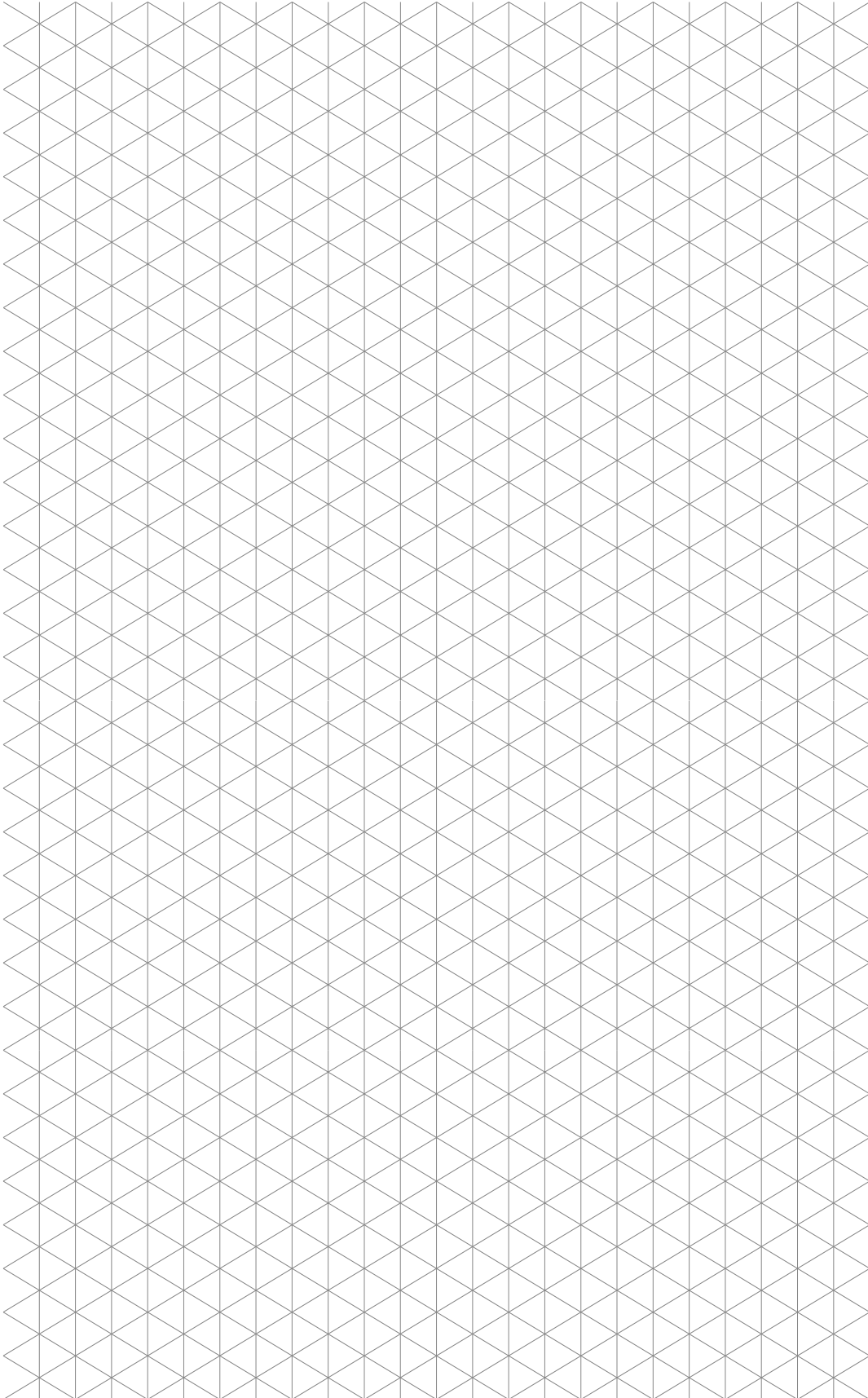


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