

UNIT G: PATTERN DEVELOPMENTS

Competency: D407.00

Prepare pattern developments.

Objective: D407.02

Construct pattern developments.

Requirements: Each student is required to create a parallel line development of a truncated cylinder (Figure 1) and a radial line development of a pyramid (Figure 2).

1. Using Figures 1 & 2, create patterns developments of the truncated cylinder and pyramid.
2. Use a drawing scale of 1 : 1.
3. Use accepted drafting standards for lines, titleblock, etc. as instructed by your instructor.
4. Add your name, problem number (406.02.001), scale, and date in the title block.
5. Time Limit = 90 minutes.
6. An effort should be made to create a balanced appearance.
7. Your work should reflect an understanding of pattern developments.

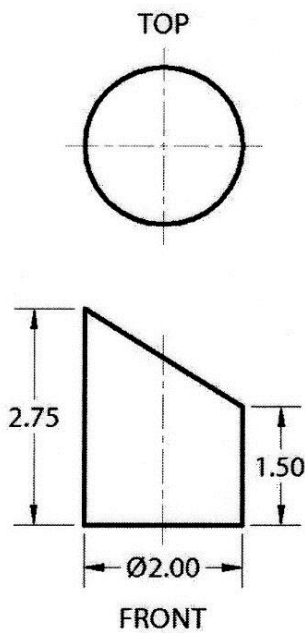


Figure 1. Truncated Cylinder.

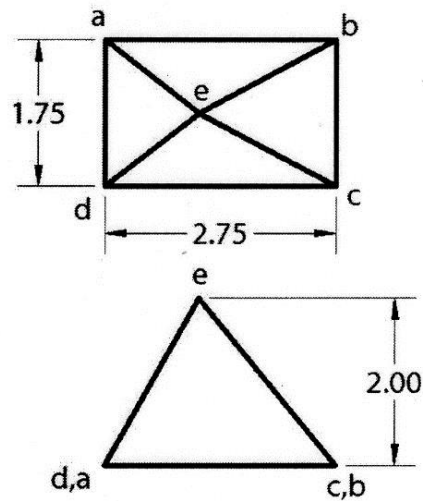


Figure 2. Pyramid.

Assessment: The problem will be evaluated based on the following criteria:

Criteria	Point Range
Drawing Setup	15 points
Accuracy of development	40 points
Lines	15 points
Dimensioning Text and Notes	15 points
Layout & balance	15 points

Rubric for Pattern Developments – Construct an Pattern Developments – 407.02.001

Drawing Setup

Numerous errors in setting up layers, limits, units, grid, snap, colors, and linetype.	Some errors in setting up layers, limits, units, grid, snap, colors, and linetype.	Layers, limits, units, grid, snap, colors, and linetype are constructed according to the specifications.	Total Points
<i>0-5 points</i>	<i>6-10 points</i>	<i>11-15 points</i>	

Accuracy of Pattern Developments

Views do not reflect the accuracy of the development.	Views partially reflect the accuracy of the development.	Views are correct, and reflect the accuracy of the development.	Total Points
<i>0-15 points</i>	<i>16-25 points</i>	<i>26-40 points</i>	

Lines

Numerous stray lines or pieces of lines. Intersections are not formed. ANSI standards for coding not followed.	Some intersections are not formed. Some lines do not meet ANSI standards.	Line quality meets ANSI standards for coding. Drawing demonstrates an obvious use of object snaps. No stray lines.	Total Points
<i>0-5 points</i>	<i>6-10 points</i>	<i>11-15 points</i>	

Dimensioning Text and Notes

Dimensions and text styles and sizes do not meet accepted standards. More than one spelling error. Misplaced or missing dimensions and/or text.	Some errors in settings for dimensions and text. No more than one spelling error.	Styles and sizes for dimensions and text meet standards as determined by the teacher. All dimensions and text are given as shown. Spelling is correct.	Total Points
<i>0-10 points</i>	<i>11-13 points</i>	<i>14-15 points</i>	

Layout & balance

The drawing is not centered vertically or horizontally. Major errors in constructing the border and title block.	The drawing is centered vertically but not horizontally (or horizontally but not vertically). Some errors in constructing the border and title block.	The drawing is centered within the working space. Border and title block are drawn as specified.	Total Points
<i>0-5 points</i>	<i>6-10 points</i>	<i>11-15 points</i>	

Total Score _____