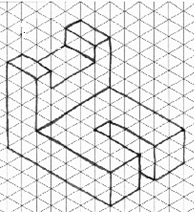


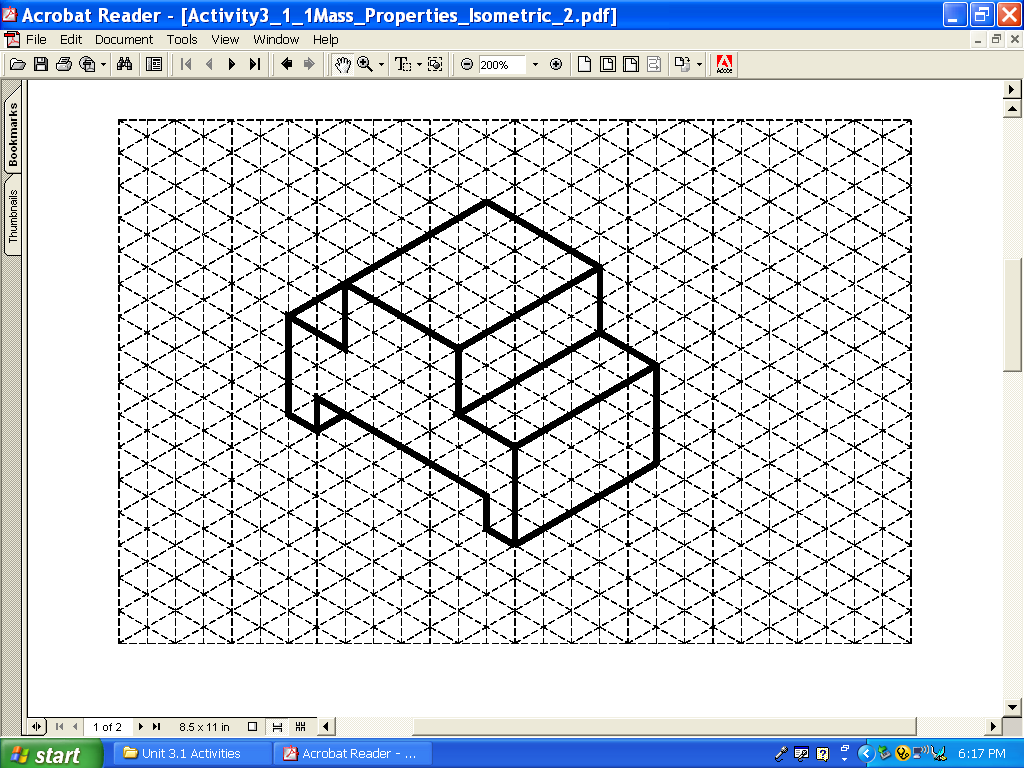
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| **Activity 7.1 More Dimensioning** |

Procedure

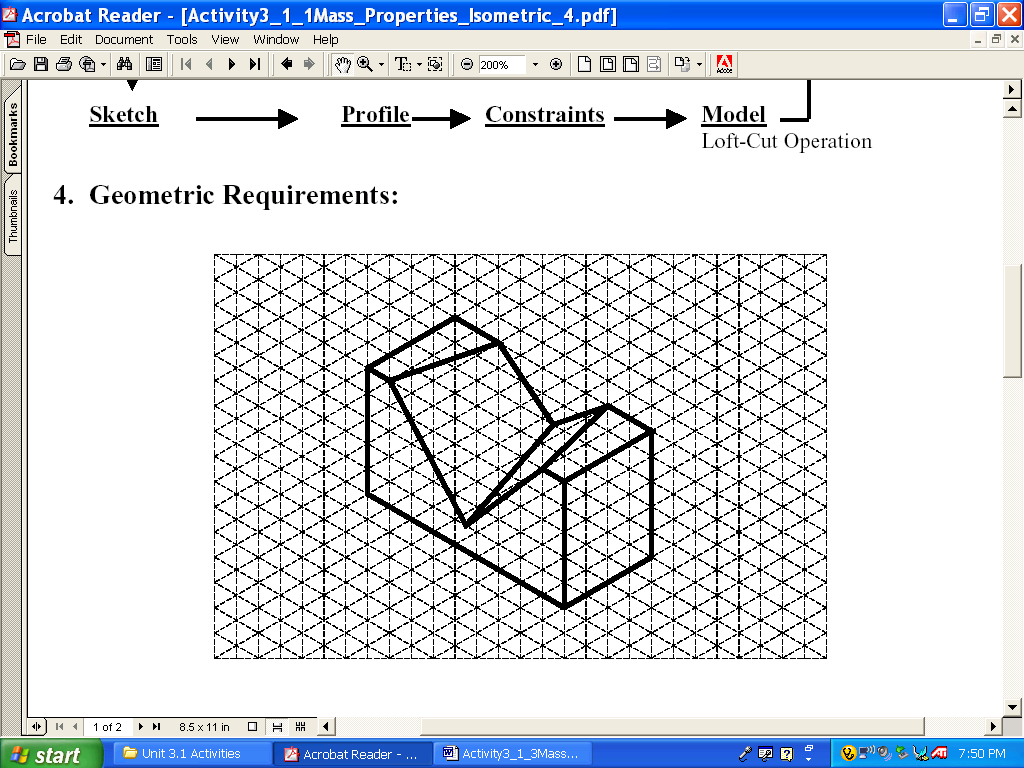
In this activity you will create part drawings of various parts that you have previously created. Your drawings should clearly document the parts such that a manufacturer can accurately create the parts.

1. Create a part file for the object at the right. The grid spacing is 0.25 inch. Next create a multi-view CAD part drawing of the object. Use **datum dimensioning**. Save the file in your Unit 7 folder as Object 1.



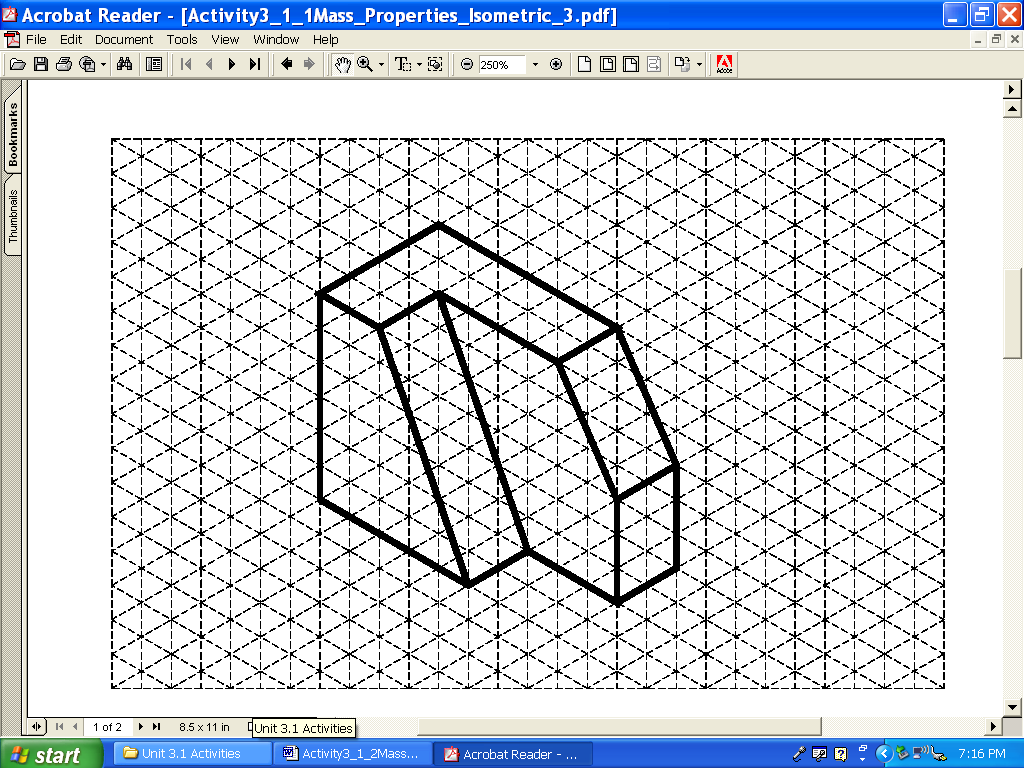


1. Create a part file for the object at the right. The grid spacing is 0.25 inch. Next create a multi-view CAD part drawing of the object. Use **chain dimensioning.**. Save the file in your Unit 7 folder as Object 2.

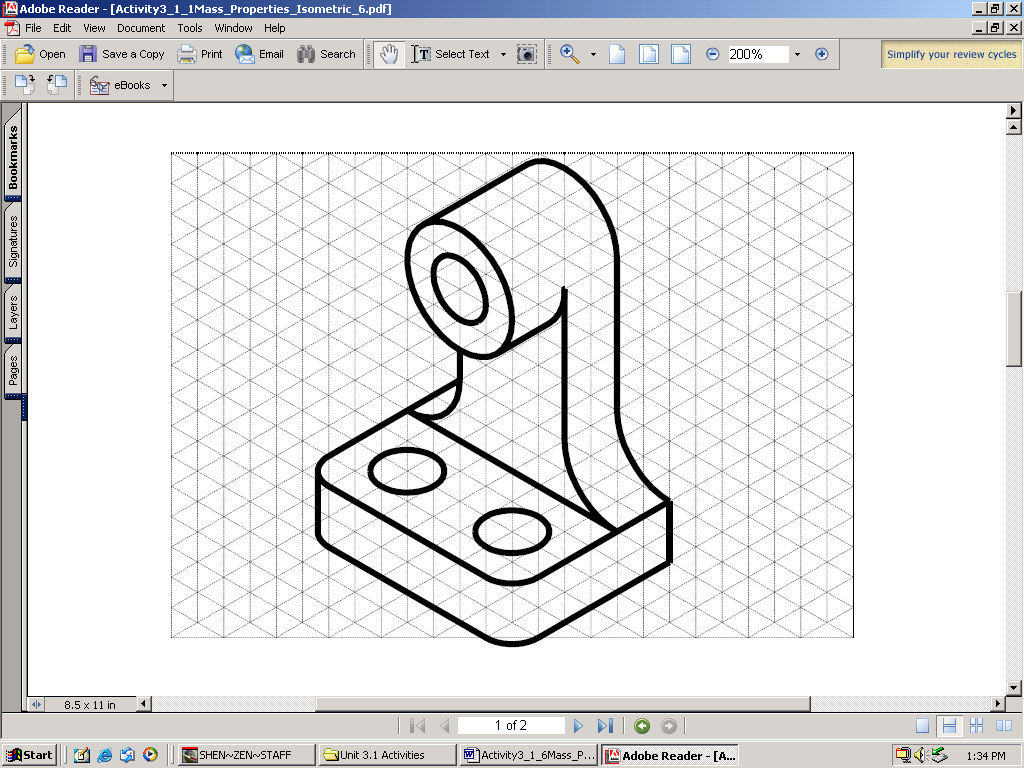


1. Create a part file for the object at the right. The grid spacing is 1 centimeter. You will need to use the Loft feature to create the groove. Next create a multi-view CAD part drawing of the object. Dimension the part drawing using the **coordinate method** for dimensioning angles and **datum dimensioning**. Save the file in your Unit 7 folder as Object 3.

1. Create a part file for the object at the right. The grid spacing for the part is 0.25 inches. Then create a fully dimensioned part drawing to represent the part using the **angular method** to dimension the angles. Use the least number of views necessary to adequately detail the part for manufacturing. Save the file in your Unit 7 folder as Object 4.



1. Create a part file for the object at the right. The grid spacing for the part is 0.25 inches. Then create a fully dimensioned part drawing to represent the part using the appropriate dimensioning techniques for circles and arcs. Use reference dimensions (to indicate multiple occurrences) when circles or arcs are repeated. Assume that all holes cut completely through the part. Indicate this by adding the word “Thru” after the hole diameter in the dimension note. Save the file in your Unit 7 folder as Object 5.



1. Print a copy of the part drawing created for the part in number 5 above. Exchange your drawing with another student. Using the Dimensioning Guidelines as a guide, make corrections to your partner’s drawing using a red pen or pencil. Be sure to document which guideline is violated for each correction. Return the mark-up to your partner.
2. Based on the marked up drawing, make appropriate corrections to your part drawing created for the part in number 5 above. Save your files. Print a copy of your revised drawing. Next to each dimension, indicate whether the dimension is a size dimension (by writing the letter “S) or a location dimension (by writing the letter “L”).
3. Create a part file for the object below. Then create a fully dimensioned part drawing to represent the part using the appropriate dimensioning techniques. Dimension the cylindrical features on a view in which they **do not** appear as a circle (presented in the Dimensioning Standards.ppt). Note that TYP means “typical” and indicates that the dimension is typical for all similar features. However, in this case use a reference dimension that indicates the exact number of occurrences (using the “X” symbol) for each repeated feature. Assume that all holes cut completely through the part. Indicate this by adding the word “Thru” after the hole diameter in the dimension note. Save the file in your Unit 7 folder as Object 6.

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