#### **AutoCAD**

#### • Geometric Construction

#### **Example: Spacer**



#### Initial Screen – AutoCAD 2012



### **Tabs and Panels**

#### • Tabs

- Home
- Blocks and References
- Annotate
- Tools
- View
- Output

#### Panels

- Draw
- Modify
- Layers
- Annotation
- Modify
- Block
- Properties
- Utilities

#### Menu-Bar

#### Note: This step is not required (recommended)



	<b>1. Initialize – Lim</b>	its (Units)	
	Note: This step is not required (recommended)	Image: Second	on
•	Pull - Down: Format - Drawing Limits Enter the limits - keyboard Lower left: -1,-1 Upper right: 4,2	Home Insert Annotate Layou   Image: Annotate Layou Image: Annotate Layer   Image: Annotate Image: Annotate Layer Layer   Image: Annotate Image: Annotate Image: Annotate Image: Annotate   Image: Image: Annotate Image: Annotate Image: Annotate Image: Annotate   Image: Imag	

	Command: *Cancel*	
ł		
and the		

Specify lower left corner or [ON/OFF] <0.0000,0.0000>: -1,-1

17 0000 11 0000.

Command: '\_limits

Reset Model space limits:

.

A Text Style...
Dimension Style...
Table Style...
Multileader Style
Plot Style...
Point Style...
Multiline Style...
Units...
Thickness
Drawing Limits
Rename...

## 2. Initialize Snap / Grid





### **4. Create Basic Features**

- <u>Circle</u>
  - Center: 0,0
  - Radius: .5
- <u>Circle</u>
  - Center: 3.125,0
  - Radius: .5
- <u>Circle</u>
  - Center: Circle (Notice: Object Snap)
  - Radius: 1.375
- Line
  - Center: Circle (Notice: Object Snap)
  - Horizontal distance: .5625
  - Vertical: Intersect Circle (Notice: Object Snap)
- <u>Circle</u>
  - Center: Intersection of circle and line (Notice: Object Snap)
  - Radius: .3125 (type value)







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### 6. Modify: Fillet



#### • *Fillet*

- Radius: .75
  - <rmb> displays options on the screen
- Select Objects
  - the fillet appears between the objects selected



### 7. Modify: Trim



#### • Command: Trim

- Select Cutting Edges
- <rmb> or Enter
  - Indicates that you are done selecting cutting edges
- Select objects to be trimmed
  - The object gets trimmed back to the edges



## 8. Check Drawing / Model



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# 9. Finish Drawing / Model

Home	Insert	Anno	tate	Layout	Parametric	View	Manage	Output	Plug-ins	Online	Sketch	Book	Designer
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Line	Polyline	Circle	Arc		Stretch		•	Vinsaved La	0		÷ (	Text	
Draw 👻			Modify 👻			Layers 🔻			A	Annotation -			

#### <u>Command: Mtext</u>

- First Corner
- Opposite Corner
- Font / Height / etc.
- Command: Rectangle



### **RECOMMENDED PRACTICE**

- Draw (Object Snaps)
- Modify