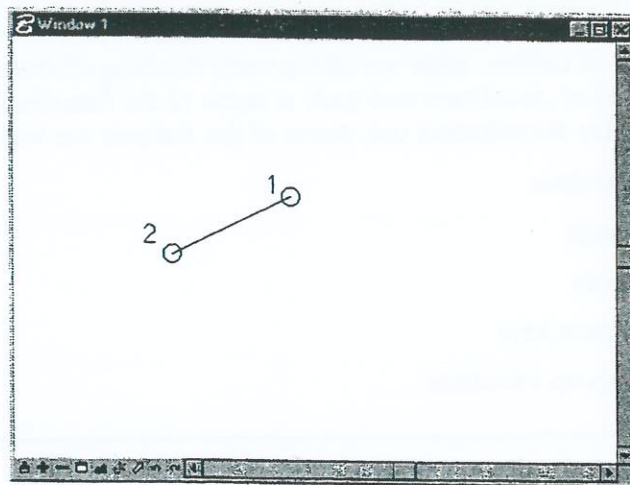


► **Place a rotated block**

In this exercise, we want to place a rotated block at the same angle as an existing line. Without *AccuDraw*, this might take several minutes and require unnecessary work. Let's see how *AccuDraw* simplifies the process.

- 1 In MicroStation, open *accudrw1.dgn*.



- 2 Start *AccuDraw* if it is not already active, then select *Place Block*.  
Be sure the *Orthogonal* mode is selected in the tool settings box.

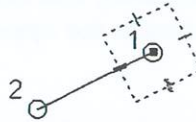
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**Notes:**

- 3 Issue *Tentative Snap ONLY* to the end of the skew line at location 1, and press the <O> shortcut key to place the *AccuDraw* origin at that location.
- 4 Key in <R><Q> to activate the *Rotate Quick* shortcut.

This puts *AccuDraw* into a *Rotate* mode. We can now freely rotate *AccuDraw*'s drawing plane about the origin we just selected, and easily align the axes at the same angle as the skew line.

- 5 Snap to the end point of the skew line at location 2, then enter a data point to accept.



The *AccuDraw* axes are now aligned with the skew line. Note the prompt in the status bar still asks us to place the first point of the block element.

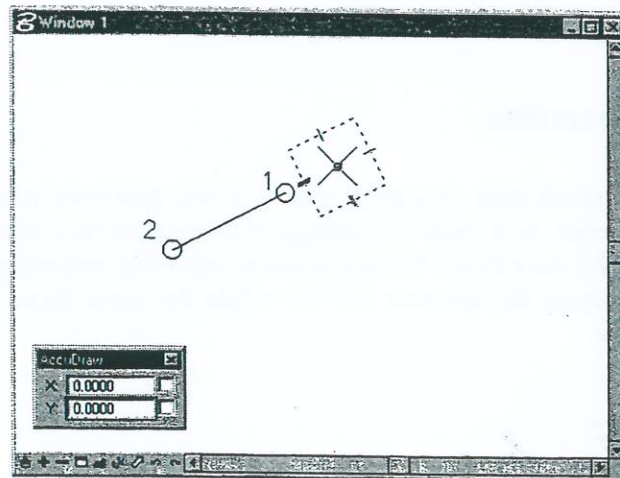
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**Notes:**

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- 6 Keeping the pointer indexed to the x-axis, move the pointer in the -x direction, and enter **10** into the *AccuDraw* window's X field.
- 7 Enter a data point to accept.

This is now the first point of the block element.



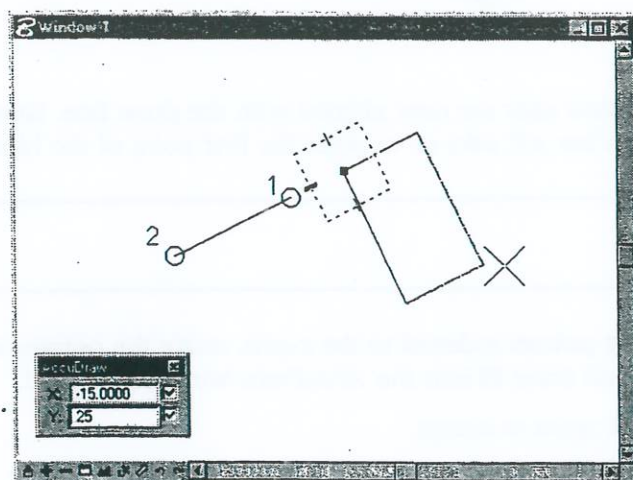
- 8 Move the pointer along the -x-axis again, and enter **15** in the X field.

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**Notes:**

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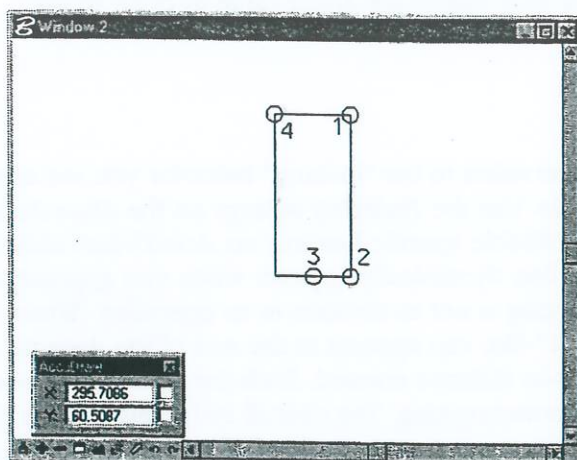
- 9 Move the pointer in the +y direction, and enter 25 in the Y field. Enter a data point to accept this location as the opposite corner of the block element.



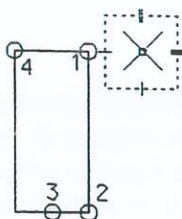
## AccuDraw Settings Operation

*AccuDraw*, in its default state, is a good tool. It is not, however, ideally suited to every drafting purpose, so it includes settings to change certain *AccuDraw* functions. Access the *AccuDraw* Settings window either by selecting *Settings > AccuDraw* or by keying the shortcut <G><S> while the input focus is in the *AccuDraw* window.

- 1 In the design file *AccuDraw1.dgn*, open Window 2.



- 2 Select the *Place SmartLine* tool from the *Main* tool frame.
- 3 Snap to location 1 and use the <O> shortcut key to place the *AccuDraw Origin* there.
- 4 Keeping the pointer indexed to the x-axis, move it to the right and enter a value of 10. Accept this location by entering a data point.

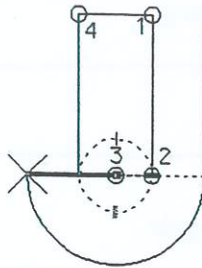


- 5 Move the pointer in the negative y-direction and press <Enter> to lock the X value.
- 6 Snap to the base of the block at location 2, then accept this location by entering a data point.

Notice that *AccuDraw* found the length of the block without a skew line. Normally, you would have to measure this length and then draw a line of that length; but *AccuDraw* simplifies the task.

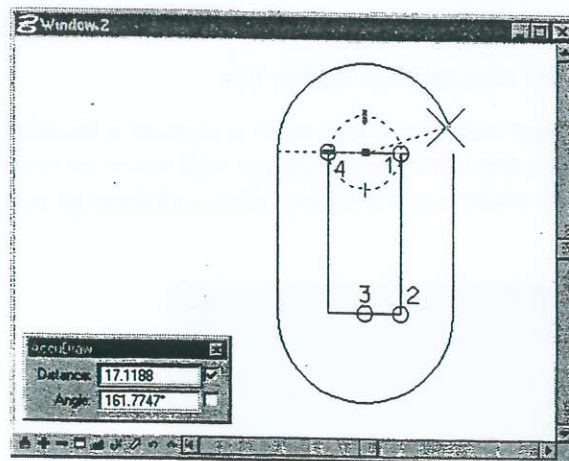
- 7 Press the <~> key to change the segment type from *Line* to *Arc*, then snap to the midpoint of the base of the block at location 3 and accept this location.

- 8 Draw a counter-clockwise 180 degree arc.



Note how easy it is to draw an arc of 180 degrees using *AccuDraw's* indexing feature.

- 9 Press the <space bar> to change the *AccuDraw* compass from polar to rectangular.
- 10 Shift the segment type back to *Line* by pressing the <~> key again, then move the pointer in the positive y-direction and press the <Enter> key to lock to this axis.
- 11 Snap to location 4 and accept with a data point.
- 12 Complete the oval by placing the top arc in the same fashion as the bottom arc you completed previously.



## Custom Shortcut Key-ins

Three buttons at the bottom of the *AccuDraw Shortcuts* window are labeled *Run*, *Edit* and *New*. The second button lets you choose an existing shortcut from the list, and edit the keys that invoke that shortcut, the shortcut's description, and the