# Compilation of DUHs

1. In any orthogonal view (top, left, etc), when you draw a rectangle in empty space, the "Measurements" box shows the horizontal dimension first. And that's how you use the numeric input in this case: horizontal, vertical.
2. If you draw it on a face, however, the measurements box shows the longest dimension first, no matter if it is the horizontal or the vertical. Thus, the order in which you should input the dimensions depends on how you start to draw it. So, if you want to keep your sanity, you might want to start drawing it with a longer horizontal dimension before using numeric input.
3. the "Move" tool has a rotate function incorporated when you select a component. Just hover your mouse over any of the six faces of the bounding box and you'll see four red crosses. Select any of them to rotate your component around its center.
4. The "orient face" (select one face then right click "orient face" makes all the object's faces orientation similar)
5. learning that I could change the axis
6. I could change the radius of a circle that's been extruded
7. put 5 in 'sides' for the circle tool creating a perfect pentagon
8. Smoove tool can be used for smoove different shapes than circular...just use your mouse drag selection area over needed vertexes and use smoove tool over them. Play with size of smoove circle to see how it affects selected area.
9. I asked him to get an image of the earth to map from our server texture folder, he opened up the folder on the second monitor and dragged it onto the sphere, I exclaimed 'What on earth are you doing" and before I could complete my sentence with the all to familiar 'you dumbass' the texture was mapped onto the sphere, sure it was not UV mapped correctly but I had not known that was possible.
10. Being able to put in "s5" in the VCB to control the number of sides *before* I create a circle or arc.
11. Being able to select only a few edges from a face and offset them instead of the whole face. but edges must be selected **without discontinuity**!
12. When you click the rotate tool and click the rotation point, don't let go of the mouse button... drag it out to either red or green (or any other snap point you set up) then click to start. This relieves any need for a vertical plane to get your rotation set up.
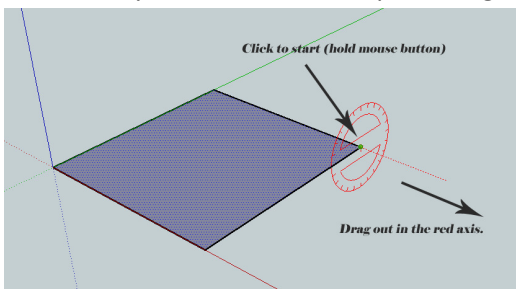


13. I discovered a "filter" in the Shortcuts box to search for the particular command.
14. did you know that if you expand the component window with the little + sign and drag your custom component to the window below it saves it in the component directory for future use

15. you could make multiple copies evenly spaced in a given length by typing in the number followed by a slash
16. you can copy your construction lines with (ctrl) copy, and then say *10 or whatever so you get 10 equally spaced.
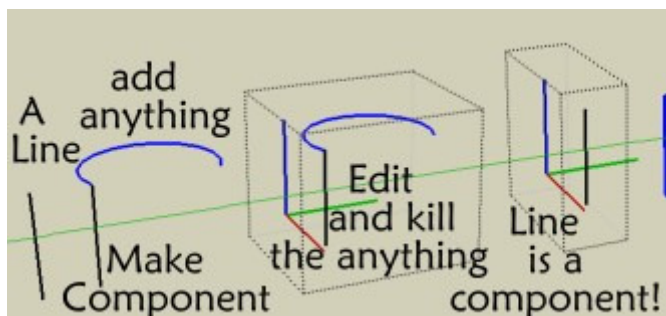17. Replace components by another
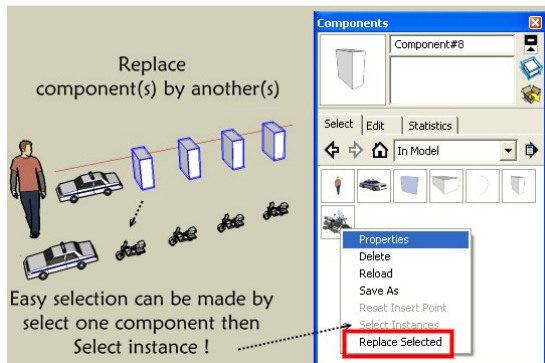


18. Shadow not on default ground

- turn off shadows on ground
- make a big,horizontal face below
- turn on shadows on faces

19. finding that by holding the spacebar down you can control the zoom in so you don't zip past the object your zooming to
20. As a line can't be directly a component



21. A line CAN be made a component. In fact, there are four ways to make a component (after you select the geometry):

1. with the make component button in the Principal toolbar;
2. from the Make component command from the Edit menu;
3. through a shortcut (the default is G);
4. finally from the context (right click) menu.

Now with a single line entity, only this latter (#4) doesn't work - all the three above (#1-3) do.

22. Also, any selection that only contains a single entity (not only a line) cannot be made a component (or group) this way. If you select a sphere (with a bounding box), there's a single "surface" selected only and you right click to turn it into a group/component in vain.

    BUT if you select the sphere by triple clicking on it, it will auto-select and highlight the softened edges bounding the facets as well and there you go; you are now able to make a group/component. Note that the resulting group/component will be the same in either way you select them.
23. when using the middle button, hold SHIFT to pan, or hold OPTION to allow the camera to tilt.
24. holding OPTION when moving an object, push/pulling an object, or rotating an object, to duplicate it.
25. I found out today that the rotate 🔄 tool does the same thing that the move ✥ tool does when you hit the Ctrl key. It puts a plus sign next to the cursor and *copies* the rotated object, leaving the original in place.
26. holding shift while using the smoove tool: smooves from normals.
27. I use the model info options to alter my segments.
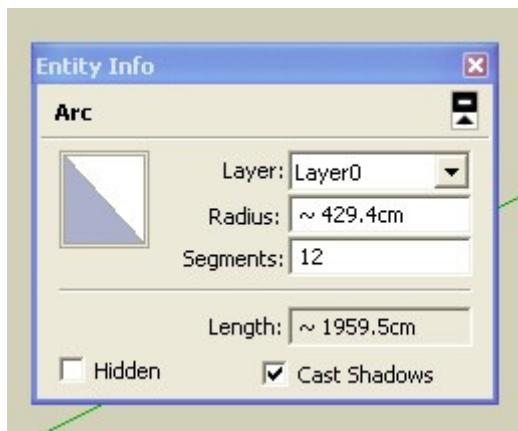


28. it has to do with dividing arc/circles into a certain amount of segments.. say you need 16 segments in an arc.. Sketchup may let you change the amount so you think you're good to go.. later in the model, you might need another arc with the same amount of segments but this time, Sketchup won't let you change it to the same amount..
    the workaround is this: change the amount to 1 higher than you need (17 instead of 16 for instance) Then change that arc to 16..
29. If one is in a complicated model and want to focus attention to a particular part of the model, one can double click on the scroll wheel at the point one is interested in and that will centre that point in the middle of the screen....making orbiting even easier.
30. I am currently working on a fairly complex model. lots of nested groups...
    I was somewhere deep down on the hierarchy, modeling on some walls, when suddenly all newly created geometry turned transparent. when I painted another colour to the faces, they ceased being transparent.

I checked the default material in the styles editor... you can't even set a transparency value there.

I closed SketchUp and reopened it. still the same.

I copied the whole model into a new SketchUp file. yet again: all newly created geometry turned transparent...

... and then it hit me... at some point while modeling and texturing, I must have accidentally painted over the parent-group with a glass material. most of the geometry within this group was supposed to be a stone wall, therefore a texture applied directly to the geometry. when I now created some new faces, these were coloured with the default material of course... but the transparent glass material on the group overwrote it...

31. when you rotate something, and you touch the rotation tool that appears on screen, the rotation will snap on the symbols of the rotation tool.

32. Discovered that ALT-Push/Pull will move a loose planar face in the face normal

33. Wanted to now all plugs by Tig

    Just today thinking to use the search Advanced engine

    [PLUGIN] + TIG + Title ONLY + Ruby Discussion= 3 pages of true gem ! Something like 75 brains storming

34. Select a face then right mouse and select Align Axis. (Let's call it AA2F) We've all seen it but did you know that what it creates depends on how your face happens to be oriented to the screen? In a nut shell AA2F aligns the Axis to the lower left most edge.

    Draw a hexagonal face. Choose the top view and use AA2F. Rotate the view of the hexagon reselect AA2F. Your Axis will shift position around the hexagon vertices.

35. Select an element (lines, surface)

    Open Entity Info yes

    Then when you select with Shift , Shift + Ctrl or Ctrl

    all surfaces or length lines are added , subtracted, modified, visible and updated in the Entity info!

36. I change the model axis pretty often when I work. But I never noticed that you can activate the axis tool (or change axis inside of a component tool) and click twice somewhere and it will move the axis to that point without changing its orientation. Normally I would have clicked once, then lined up the axes and click and line up and click. So a double click (not too fast though!) is much faster for moving the axis.

37. you can apply the smoothing to groups/components, without entering them. so you can select all the groups at once and only have to do the process once! (doesn't work with nested groups though)

38. the erase function hides and smoothes edges if you use it in combination with alt ctrl and shift...

39. I can drag-and-drop images straight from Firefox into the SketchUp viewport

40. you can use more than one modifier key when setting up shortcut keys. example

    ctrl + shift + alt + Q

    or anything along those lines.

41. Triangulate a simple rectangle surface with the Sand box?
    Just draw a diagonal first!
    Then apply the Sand box "Add détails"
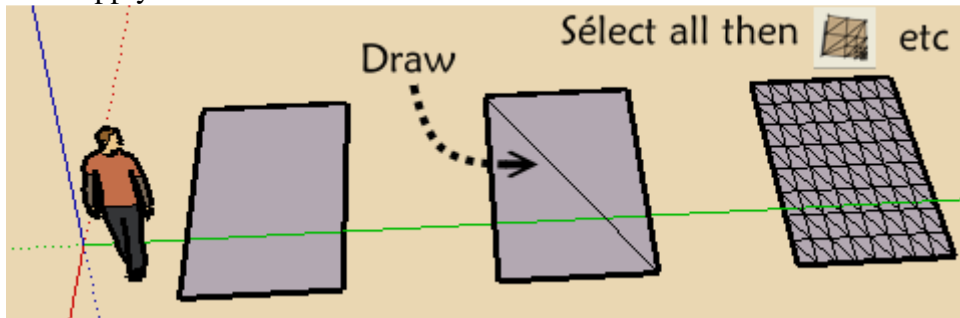


42. Shadows from lines
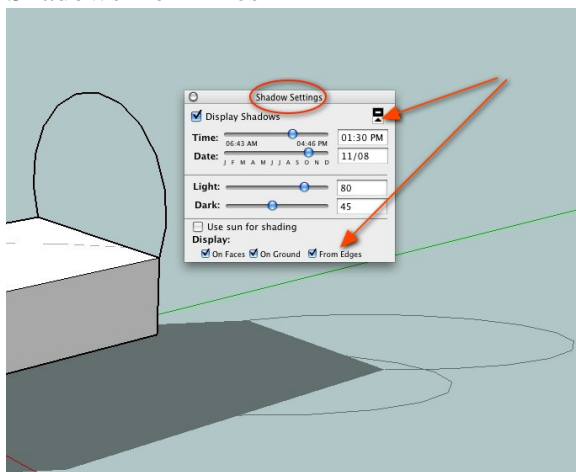


43. Just learned the physical size of the SU window matters when trying to print to scale.
    No matter what I did I could not get my un-scaled print on a single page, even though it would
    have easily fit on a single page. After making the SU window narrower than the height, SketchUp
    decided it would fit a a single sheet after all.
44. Keep in mind the [move] tool rotate is a bit different from the [rotate] tool.
    With move/rotate the 4 selection grab points (red +) are inset at mid point of the sides of the
    bounding box, BUT the actual axis of rotation is only perpendicular to the centroid of the
    bounding box selection face, regardless of the objects actual shape and mass center. The [move]
    tool can ONLY rotate groups and components, no other objects.
    The rotate tools selection point is anywhere on any selected object(s) (anywhere in the drawing)
    and the rotation axis is perpendicular to the face at the selection point. If you need to rotate the
    object on an axis not perpendicular to the selection face, you need to place the protractor on a
    parallel face then [shift] move and then [click] the protractor to the selection point and
    complete the rotation. Otherwise you will need a temporary face to force the axis alignment for
    the rotate. The temp face need not be on any actual face of the object, but as a safeguard,
    group it first to avoid merging. To aid in placing the protractor center correctly, place a guide

line in the desired axis of rotation, passing through the temp face. Place the protractor center on the intersection of the guide line through the temp face and complete the rotation.

45. using the [extrude] tool to quickly "select" (highlight actually) faces to reverse or delete. Just hover the tool over the face (NO clicking) and using shortcut keys "D" = delete, "R" = reverse face to either delete them or reverse them. Very fast that way for multiple faces.

46. I just noticed you can use 'paste in place' for moving ungrouped geometry inside an already grouped geometry. It helps a lot when you are outlining something in a blueprint and then paste in place in a group, like a plane's wing for intersection.

47. This  and the Offset tool keep their last measures even you use some other tools between them!

48. Several tools remember the last used value [during that session] - Offset and PushPull are the main ones.
    Make an Offset on a Face - enter 100.
    Later Choose the Offset Tool again and double-click on a Face - it will Offset 100...
    Do a PushPull on a Face - enter 10.
    Later Choose the PushPull Ttool again and double-click on a Face - it will PushPull 10...

49. I find it tedious to reactivate selection tool, select item, move it and repeat. So when things are still simple, I keep the move tool activated and select objects right clicking on them

50. don't forget the shortcut for selecting... it's spacebar

51. Use the Tape Measure tool to scale a model

52. there is a 'show nested components' tick box in model info -> statistics.

53. Move+ctrl to copy + typed 'dimension' + <enter> moves the copy by that 'dimension'.
    Immediately typing 10x [or 10* or x10 or *10 !] will copy 10 times, at that dimension each time. Alternatively immediately typing /10 will take the 'dimension' as the *total* distance and make 10 copies that are fitted into the distance, dividing the 'dimension' into 10 equal parts - as you say great if you want to subdivide 7 3/16" into 3 parts without worrying about the Math.

54. SHIFT+  = Hide

    and CTRL+  = Soften

     +Ctrl+Shift unsoftens edges

55. Regarding textures; it does not really control how they are applied but how you can apply them. I.e. you cannot manipulate texture mapping (positioning, projection etc) on curved surfaces only on singular face(t)s. In order to access these on curved surfaces and be able to do anything, you need to show hidden geometry first.

56. I hardly ever mess with the axes settings, but have finally had a need to start using this and often found I would inadvertently set the blue axes downwards rather than up.
    Was watching a tutorial this morning, and found that if one triple clicks (after setting the red axis) it is automatically done correctly for you

57. When you use the Rectangle tool and make the first click on an edge that is connected to a face, the rectangle tool will align to the edge

58. When you have a very long list of Plugins under Menu Plugins
    Just press a letter on the keyboard and you can see every plugs beginning by this letter

59. +Ctrl+Shift un-smoothes edges

60. When you create a component with glue property you must reload it from the menu
    Component

61. But it does glue to, when created on a face

62. in the Entity Info window SketchUp puts a "solid" in front of the group's name to indicate, when
    an object is indeed solid.

63. The day I discovered SHIFT + pressing the scroll wheel = pan was a good day.

64. LMB + scroll wheel = Pan as well

65. Take a 10' cube, use the scale tool to vertically stretch the cube, and just type a distance. This
    becomes the new height for your selected object. You don't need to give it a positive or negative
    number to say home much smaller or bigger you want it. Just type the size you want it to be. If it
    happens to be smaller than the existing size, then it will get smaller. This seems more useful on a
    single axis stretch, but it also works when scaling x,y & z at the same time.
    you can type a negative distance to mirror the object, and if you do a non,uniform 2d or 3d
    scale, you can type multiple distances, to for example make whatever shape you have drawn, fit
    in a 20',30',50' bounding box.
    that works also for Move and Rotate

66. I used to think you had to click and drag whenever you push/pull, move, rectangle, circle, etc. I
    just found out a couple of months ago that you could just click, get it where you want it, and
    click again to finish
    And double-clicking will repeat last operation

67. Draw first the line  then use 
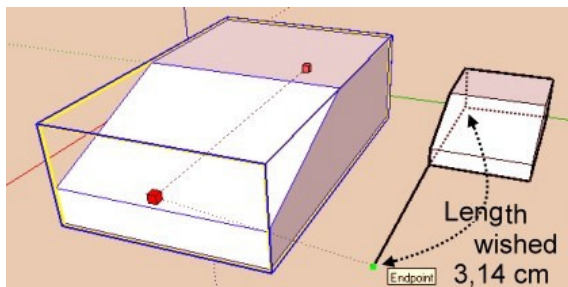
    

    you can also with only  just enter in the VCB
    (whatever unities in activity)
    3.14cm
    31.4mm
    0.0314m

68. You can Press in the SAME TIME SHIFT AND CTRL with the Scale tool

69. Using the Entity Info box you can increase the length of a line and No. of sides of a circle
    And a polygon and an arc...

70. while using the Paint Bucket Tool you could hold down Shift to paint all that match or hold Ctrl to paint all connected.
71. Edit > Delete Guides is context-sensitive - it deletes guides all guides starting from the current editing context and deeper, but not from "higher" level contexts. I had always thought it always deleted all guides, everywhere.
72. never knew that you could make a unique texture from a portion of another
73. I've always known about hiding geometry by holding the shift key with the eraser, but last week I just noticed the "hidden" check box on the entity info window