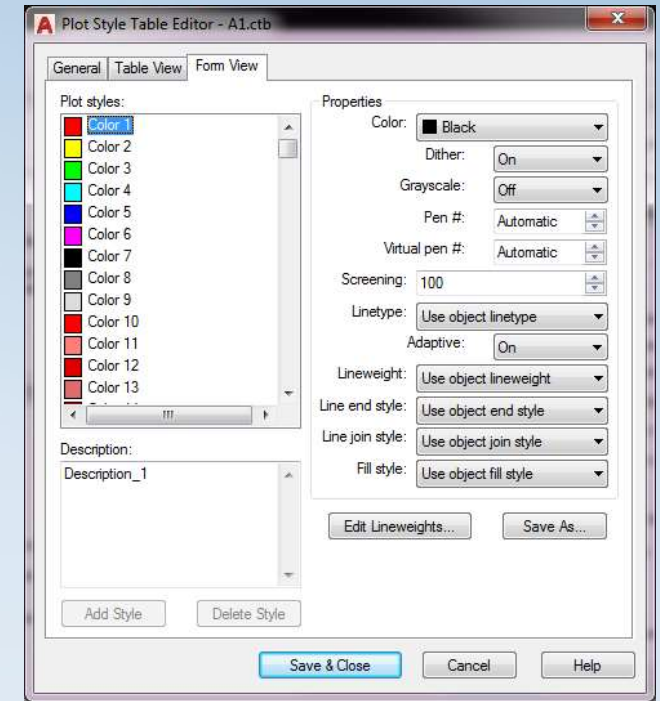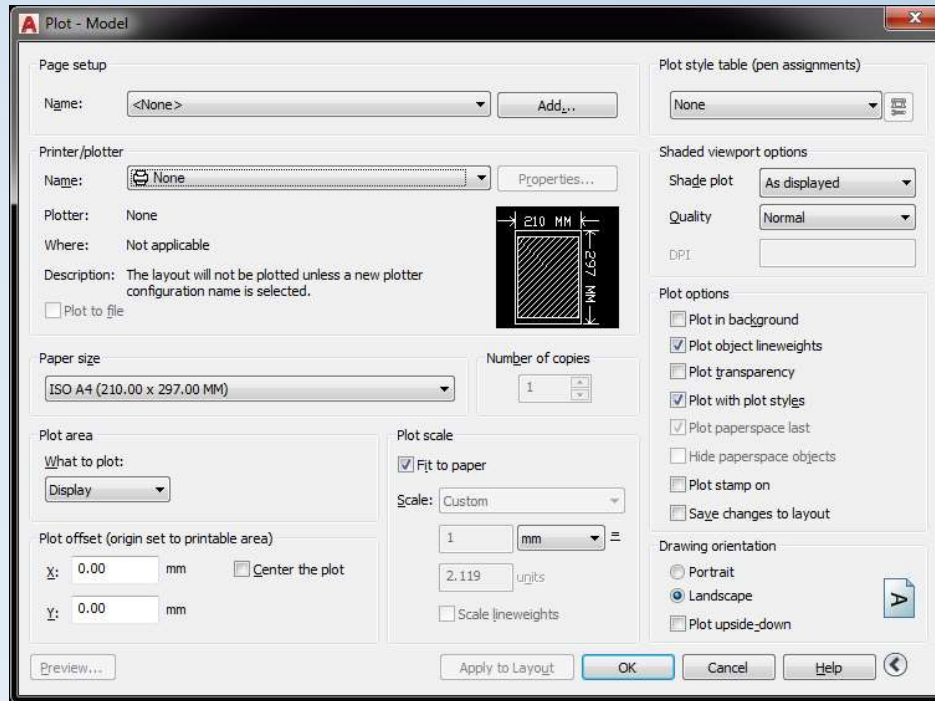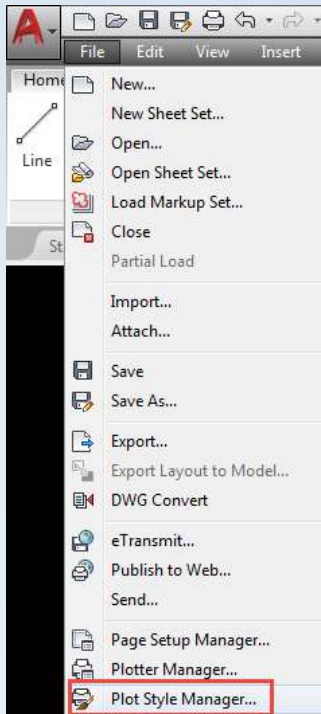# Ritningsteknik

Autocad 2017

Page Setup / Plotstyle

Viewport

VIEWPORTS

Note: This is just the concept to get you thinking. The actual step-by-step instructions will follow in the exercises.

Viewports are only used in Paper Space (Layout tab). Viewports are holes cut into the sheet of paper displayed on the screen in Paper Space. Viewports frames are objects. They can be moved, stretched, scaled, copied and erased. You can have multiple Viewports, and their size and shape can vary.

Note: It is considered good drawing management to create a layer for the Viewport

"frames" to reside on. This will allow you to control them separately; such as setting the viewport layer to "No plot" so it will not be plotted out.

HOW TO CREATE A VIEWPORT

1. First, create a drawing in Model Space (Model tab) and save it.

2. Select the "Layout1" tab.

When the "**Page Setup Manager**" dialog box appears, select the **New** button. Then you will select the Printing device and paper size to plot on. (Refer to "How to Create a Page setup" on page 26-13.)

3. You are now in Paper Space. Model Space appears to have disappeared, because a blank paper is now in front of Model Space, preventing you from seeing your drawing. You designated the size of this sheet in the "page setup" mentioned in #2 above. (The Border, title block and notes will be drawn on this paper.)

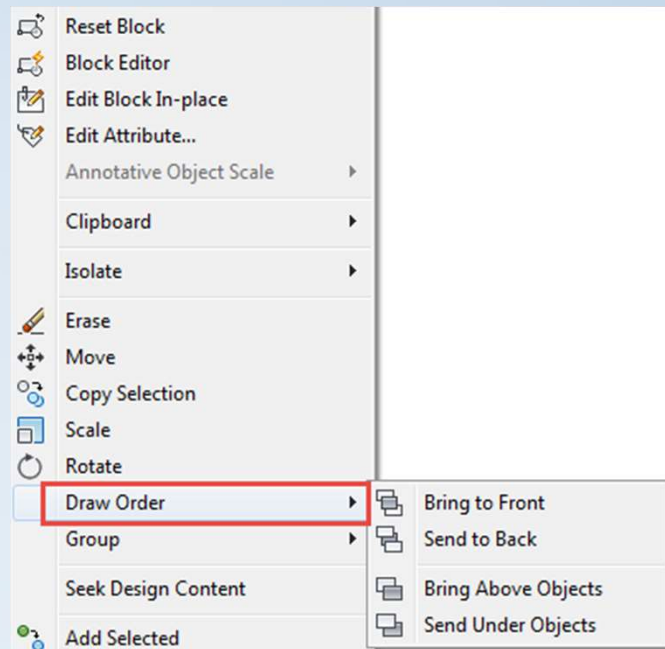4. Draw a border, title block and notes in Paper Space (Layout)

Now you will want to see the drawing that is in Model Space.

5. Select layer "**Viewport**" (You want the viewport frame to be on layer viewport)

6. Select the Viewport command using one of the following:

   Rectangular   Named   Clip   Lock
   Layout Viewports
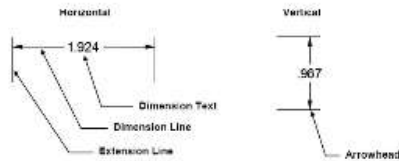
7. Draw a rectangular shaped Viewport "frame" by

Kommando Draworder - Cycling

LINEAR DIMENSIONING

Linear dimensioning allows you to create horizontal and vertical dimensions.

1. Select the **LINEAR** command using one of the following:

   Command:__dimlinear

2. Specify first extension line origin or <select object>: *snap to first extension line origin (P1)*.

3. Specify second extension line origin: *snap to second extension line origin (P2)*.

4. Specify dimension line location or [Mtext/Text/Angle/ Horizontal/Vertical/Rotated]: *select where you want the*

CONTINUE DIMENSIONING

Continue creates a series of dimensions in-line with an existing dimension. If you use the continue dimensioning immediately after a Linear dimension, you do not have to specify the continue extension origin.

1. Create a linear dimension first (**P1 and P2 shown below**)

2. Select the Continue command using one of the following:

   Command: _dimcontinue

3. Specify a second extension line origin or [Undo/Select] <Select>: *snap to the second extension line origin (P3)*.

4. Specify a second extension line origin or [Undo/Select] <Select>: *snap to the second extension line origin (P4)*.

5. Specify a second extension line origin or [Undo/Select] <Select>: *press <enter> twice to stop.*

ALIGNED DIMENSIONING

The **ALIGNED** dimension command aligns the dimension with the angle of the object that you are dimensioning. The process is the same as Linear dimensioning. It requires two extension line origins and the placement of the dimension text location. (Example below)
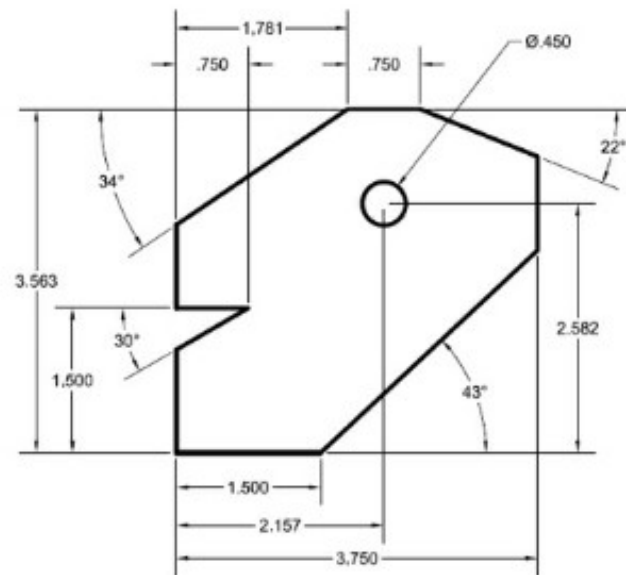
1. Select the **ALIGNED** command using one of the following:

   Command: _dimaligned

2. Specify first extension line origin or <select object>: *select the first extension line origin (P1)*

3. Specify second extension line origin: *select the second extension line origin (P2)*

4. Specify dimension line location or [Mtext/Text/ Angle]: *place dimension text location (P3)*

Dimensions

Refer to the next page for drawing hints

Övning

MATCH PROPERTIES

Match Properties is used to "paint" the properties of one object to another. This is a simple and useful command. You first select the object that has the desired properties (the source object) and then select the object you want to "paint" the properties to (destination object).
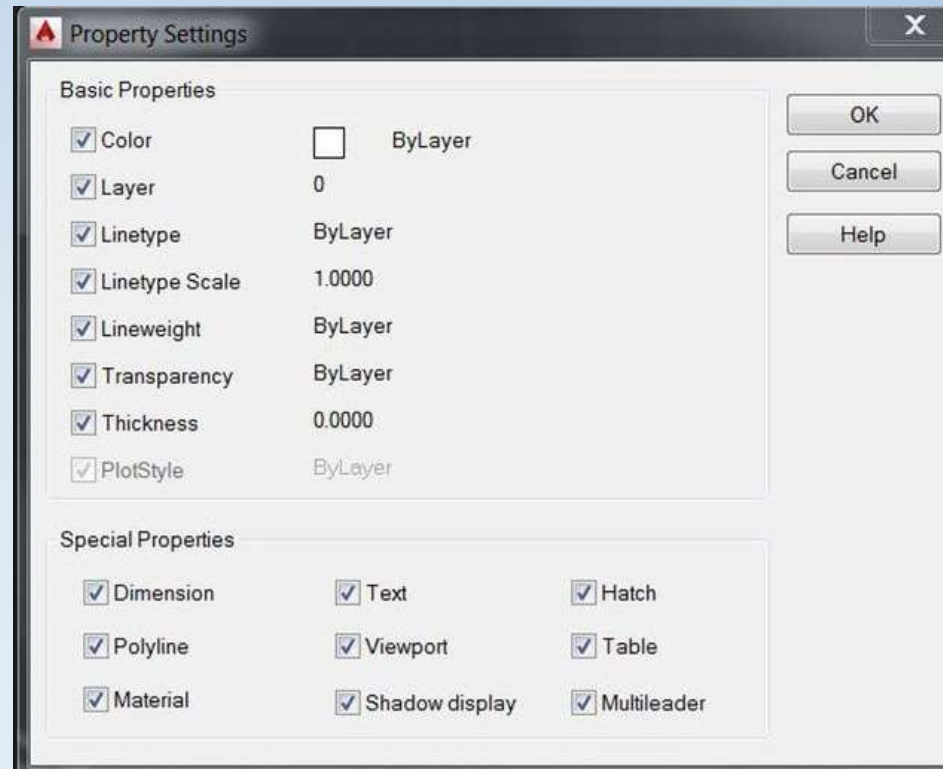
Only one "source object" can be selected but its properties can be painted to any number of "destination objects".

1. Select the Match Properties command using one of the following:

    Ribbon = Home tab / Properties panel /
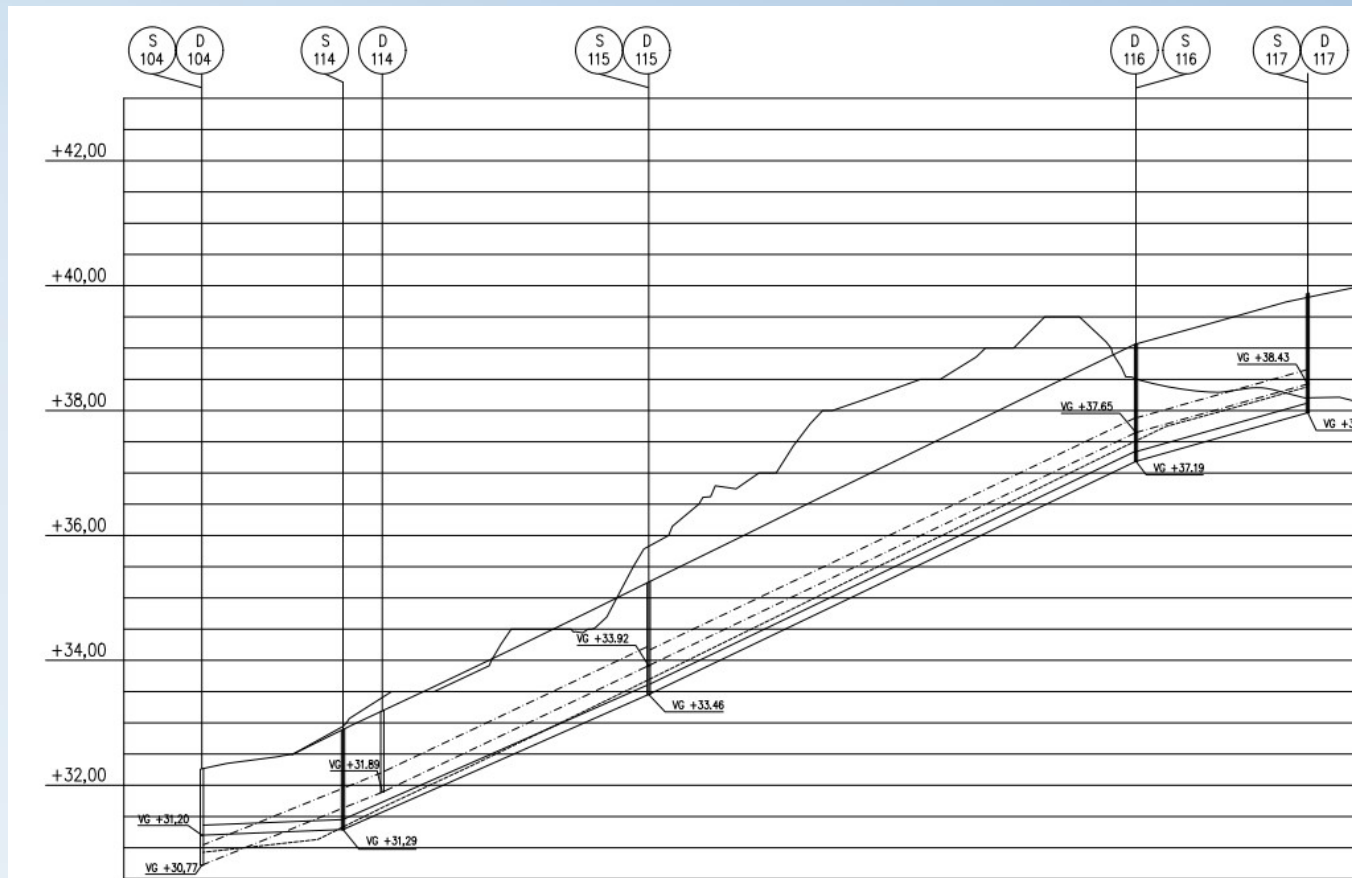   or
    Keyboard = MA <enter>
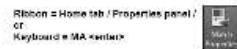
    Command: matchprop

2. Select source object: *select the object with the desired properties to match*

3. Select destination object(s) or [Settings]: *select the object(s) you want to receive the matching properties.*

4. Select destination object(s) or [Settings]: *select more objects or <enter> to stop.*

Property Settings X

Basic Properties

☑ Color   ☐   ByLayer

☑ Layer   0

☑ Linetype   ByLayer

☑ Linetype Scale   1.0000

☑ Lineweight   ByLayer

☑ Transparency ByLayer

☑ Thickness   0.0000

☑ PlotStyle   ByLayer

Special Properties

☑ Dimension   ☑ Text   ☑ Hatch

☑ Polyline   ☑ Viewport   ☑ Table

☑ Material   ☑ Shadow display   ☑ Multileader

OK
Cancel
Help

Properties

- Projekt 3

Profil ritning

- Projekt 7 med HATCH objekt

The **HATCH** command is used to create hatch lines for section views or filling areas with specific patterns.

To draw **hatch** you must start with a closed boundary. A closed boundary is an area completely enclosed by objects. A rectangle would be a closed boundary. You simply place the cursor inside the closed boundary or select objects.

Note:
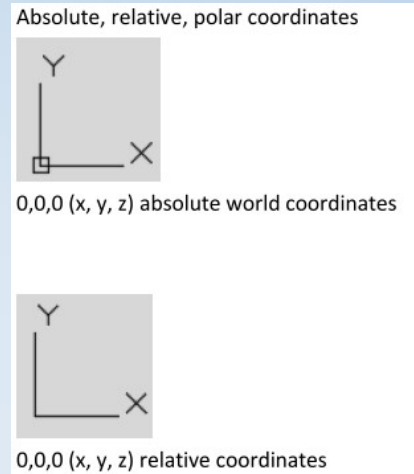
A Hatch set is one object.

It is good drawing management to always place Hatch on it's own layer.

Use Layer Hatch. You may also make Hatch appear or disappear with the **FILL** command (pg. 5-6)

Calculate area / length

Projekt 3

Kommando
UCS
PLAN

Absolute, relative, polar coordinates

0,0,0 (x, y, z) absolute world coordinates

0,0,0 (x, y, z) relative coordinates

User coordinate system