

MARIANNE CENTNER AND FRANCES VEREKER

# FASHION DESIGNER'S HANDBOOK FOR ADOBE ILLUSTRATOR

SECOND EDITION



top w  
e trim

Drop wa  
x-over

Mask Skirt with  
embroidered hem

Broderie dress

# Fashion Designer's Handbook for **Adobe Illustrator**

Second Edition

MARIANNE CENTNER | FRANCES VEREKER



 **WILEY**

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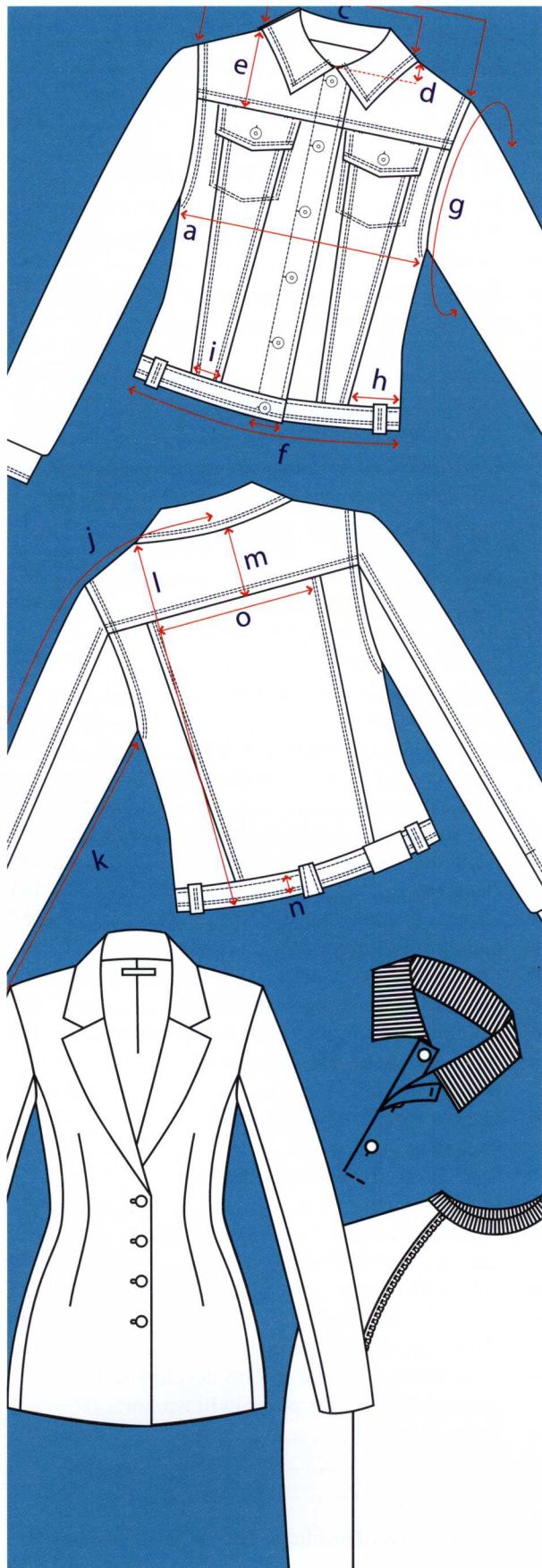
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Fashion Designer's Handbook for  
**Adobe Illustrator**

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# PREFACE



This book aims to teach fashion designers, both students and those in the industry, how to use **Adobe Illustrator®** to create technical drawings, fashion drawings and story boards and how to combine **Adobe Illustrator** and **Adobe Photoshop®**.

Through our own experiences of struggling with the complexities of these two vast and powerful Computer aided Design (CAD) programs, we realised that it would be fantastic if the needs of the clothing industry were addressed. To this end we have devised an outcomes-based instruction book that will clearly and methodically take you from creating a simple shape to a fashion drawing in **Adobe Illustrator** and **Adobe Photoshop**.

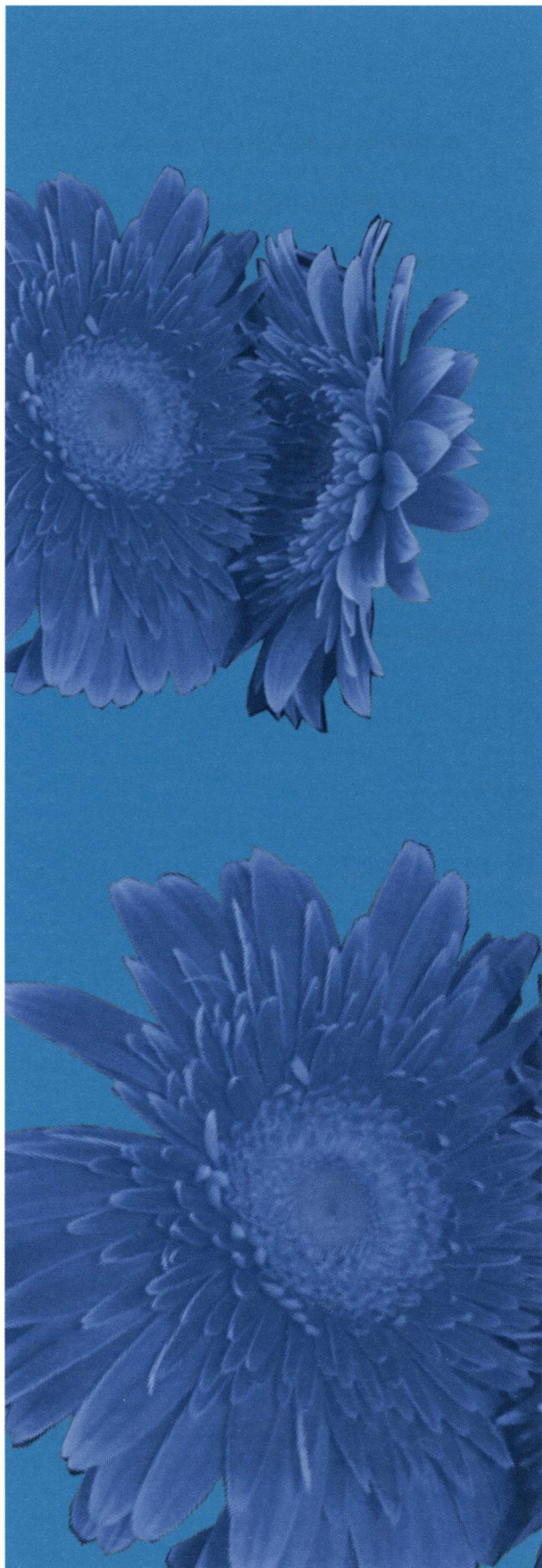
Our method is a culmination of Frances Vereker's extensive experience over the past 20 years teaching fashion drawing and computer drawing to students and teachers and Marianne Centner's vast industry experience over 25 years, working exclusively in Adobe Illustrator and Adobe Photoshop for a number of years. We expect that you will have basic computer knowledge and it is with this in mind that we have adopted a step-by-step approach.

The detailed instructions are thought out in such a way as to give you as much information as you need to perform the tasks throughout the book. We do not give too much information at one time. The method we have used will easily help you grasp the concept of **Adobe Illustrator** and vector drawing. This book will be a useful and ongoing quick guide until such time as you can remember the uses of all necessary tools. Once you have grasped the basic concepts we take you through increasing degrees of complexity, introducing you to more difficult techniques.

By the time you have finished this book we expect that you will have learned all the techniques necessary to produce professional story boards and technical drawings. The final chapter of story boards will further inculcate the techniques set out in this book.

It must be understood that what we demonstrate are methods that we use, they are not the only way to achieve results – considering the vastness of both applications. We believe when you have mastered our methods you will have the confidence to allow your own creativity to lead you to the best results. We encourage you to explore and experiment as much as we do!

# ACKNOWLEDGEMENTS



The authors gratefully acknowledge the invaluable assistance of those who have contributed to the compilation of this book. They would particularly like to thank the following people:

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We also thank our families and friends for being so supportive during the frantic months of writing. Especially Jurek Tanewski and Catherine Crothers for their unfailing support and encouragement.

Lastly we would like to thank all our students who have used the first edition and have had valuable input into what we needed to expand on. This edition builds on the foundation of the first edition and expands on current methods and the new features in the latest programs.

# ADOBE ILLUSTRATOR – QUICK REFERENCE TOOLS PANEL

*By clicking on the black arrow in the corner of a tool you will have access to other options*

**Selection Tool (V)**

**Pen Tool (P)**

**Line Segment Tool (A)**

**Rotate Tool (R)**

**Mesh Tool (U)**

**Eyedropper Tool (I)**

**Hand Tool (H)**

**Default Fill & Stroke (D)**

**Color (<)**

**Gradient (>)**

**Direct Selection Tool (A)**

**Lasso Tool (Q)**

**Type Tool (T)**

**Rectangle Tool (M)**

**Pencil Tool (N)**

**Eraser Tool (shift E)**

**Scale Tool (S)**

**Free Transform Tool (E)**

**Blend Tool (W)**

**Scissor Tool (C)**

**Zoom Tool (Z)**

**Swap Fill & Stroke (Shift X)**

**None (/)**

**Fill & Stroke boxes**  
**X** to bring forward fill or stroke  
**/** to remove colour from stroke or fill  
**<** to put the last colour used back into the stroke or fill

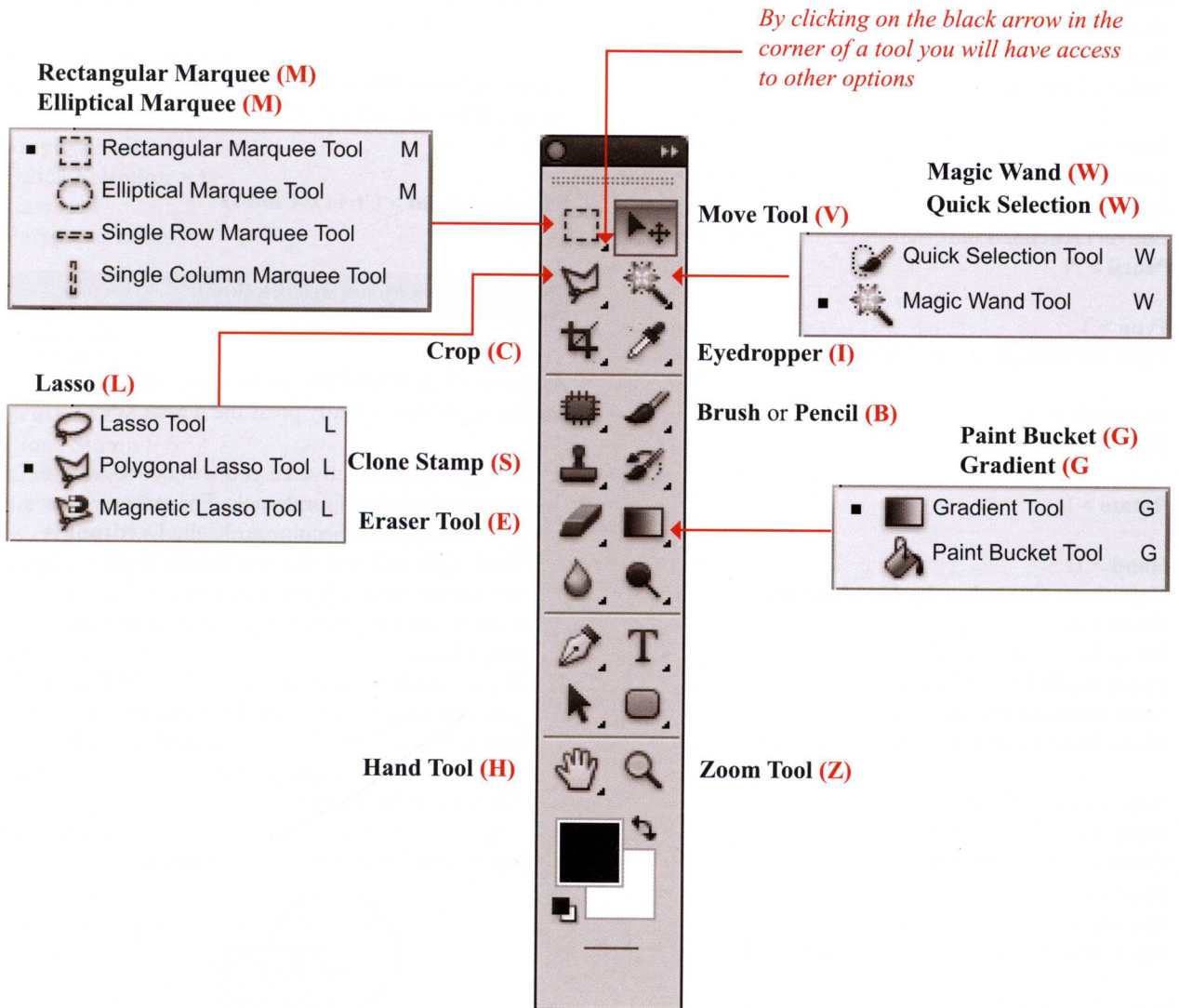
**Type Tool (T)**

**Shapes M = Rectangle  
L = Ellipse**

THROUGHOUT THE BOOK ALL APPLE MACINTOSH OS COMMANDS WILL BE HIGHLIGHTED IN BLUE WHERE THEY ARE DIFFERENT TO PC COMMANDS. Please note that the Toolbox commands are the same for both Apple Macintosh and PC.



# ADOBE PHOTOSHOP – QUICK REFERENCE TOOLS PANEL



THROUGHOUT THE BOOK ALL APPLE MACINTOSH OS COMMANDS WILL BE HIGHLIGHTED IN BLUE WHERE THEY ARE DIFFERENT TO PC COMMANDS. Please note that the Toolbox commands are the same for both Apple Macintosh and PC.

## Adobe Illustrator Keyboard Shortcuts

Selection > **V**

Direct Selection > **A**

Undo > **Ctrl Z/Cmd Z**

Redo > **Shift Ctrl Z/Shift Cmd Z**

Pen > **P**

Add Anchor Point > **+**

Delete Anchor Point > **-**

Convert Anchor Point > **Shift C**

Pencil > **N**

Type > **T**

Type Tool Palette > **Ctrl T/Ctrl T**

Rectangle > **M**

Ellipse > **L**

Rotate > **R**

Hand > **H**

Hold down Space bar for Hand option

Zoom > **Z**

Zoom In > **Ctrl +/Cmd +**

Zoom Out > **Ctrl -/Cmd -**

Show/Hide All Panels > **Tab**

Show/Hide All But Toolbox > **Shift Tab**

New > **Ctrl N/Cmd N**

Open > **Ctrl O/Cmd O**

Close > **Ctrl W/Cmd W**

Save > **Ctrl S/Cmd S**

Save As > **Shift Ctrl S/Shift Cmd S**

Document Setup > **Alt Ctrl P/ Alt Cmd P**

Print > **Ctrl P/ Cmd P**

Select All > **Ctrl A/Cmd A**

Copy > **Ctrl C/Cmd C**

Paste > **Ctrl V/Cmd V**

Paste in Front > **Ctrl F/Cmd F**

Paste in Back > **Ctrl B/Cmd B**

Preferences > **Ctrl K/Cmd K** - Keyboard Increment

Transform Again > **Ctrl D/Cmd D**

Bring to Front > **Shift Ctrl ]/Shift Cmd ]**

Bring Forward > **Ctrl ]/Cmd ]**

Send Backward > **Ctrl [/Cmd [**

Send to Back > **Shift Ctrl [/Shift Cmd [**

Group > **Ctrl G/Cmd G**

Ungroup > **Shift Ctrl G/ Shift Cmd G**

Average > **Alt Ctrl J/Alt Ctrl J**

Join > **Ctrl J/Ctrl J**

Toggle between Fill & Stroke > **X**




Swap Fill/Stroke > **Shift X**

None > **/**

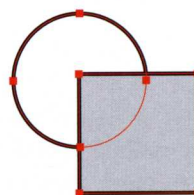
Exit a program > **Ctrl Q/ Cmd Q**

## Keyboard Shortcuts Troubleshoot

As you work in Adobe Illustrator a few small things can happen if you accidentally press the wrong keys

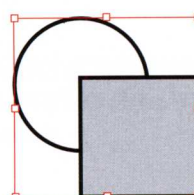
1. If **Caps Lock** is activated you will not be able to see the symbols of some tools. For example, the **Pen Tool** () will become an X, the **Eyedropper Tool** () will look like the **Rotate Tool** () and the **Rotate Tool** will just be a + symbol. If you want to see the symbols again, just de-activate **Caps Lock**
2. If you accidentally press **Shift Ctrl B/Shift Cmd B** you will activate the 'Hide Bounding Box' option, which makes it difficult to scale and move objects. To de-activate this option go to **View** in the **Menu bar**

↓  
**Show Bounding Box (Ctrl B/Cmd B)**



1. If you accidentally press **Ctrl H/Cmd H** you will activate the 'Hide Edges' option, which hides the activated edge of an object and you cannot see anchor points or highlighted lines. To de-activate this option go to **View** in the **Menu bar**

↓  
**Show Edges (Ctrl H/Cmd H)**



## Adobe Photoshop Keyboard Shortcuts

Move Tool > **V**

Rectangular Marquee > **M**

Elliptical Marquee > **M**

Magic Wand > **W**

Quick Selection > **W**

Lasso > **L**

Polygonal Lasso

Crop > **C**

Eyedropper > **I**

Brush or Pencil > **B**

Clone Stamp > **S**

Eraser Tool > **E**

Set the size of these four tools to a larger or smaller size by pressing the brackets keys, the left bracket > **[** for larger and the right bracket > **]** for smaller

Paint Bucket > **G**

Gradient > **G**

Undo > go to History panel or for one move only:

Undo > **Ctrl Z/Cmd Z**

Redo > **Shift Ctrl Z/Shift Cmd Z**

Free Transform > **Ctrl T/Cmd T** - Enter to finish

Hand > **H**

Hold down Space bar for Hand option

Zoom > **Z**

Show/Hide All Panels > **Tab**

Show/Hide All But Toolbox > **Shift Tab**

New > **Ctrl N/Cmd N**

Open > **Ctrl O/Cmd O**

Close > **Ctrl W/Cmd W**

Save > **Ctrl S/Cmd S**

Save As > **Shift Ctrl S/Shift Cmd S**

Print > **Ctrl P/ Cmd P**

Select All > **Ctrl A/Cmd A**

Deselect > **Ctrl D/Cmd D**

Copy > **Ctrl C/Cmd C**

Paste > **Ctrl V/Cmd V**

Preferences > **Ctrl K/Cmd K** - Keyboard Increment

Toggle between Foreground and Background > **X**

Exit a program > **Ctrl Q/ Cmd Q**

*In both Adobe Illustrator and Adobe Photoshop there are many more shortcut keys. The ones we have highlighted are the ones we find ourselves using most frequently. You are also able to create your own shortcuts for actions you find yourself doing more frequently. Consult the help menu for this.*

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Note: some parts of headings and sub-headings may be summarised.

### Drawing a Simple Shape



**CHAPTER 1** outlines the difference between bitmap and vector images, the basics of file management and file paths, and the Adobe Illustrator tools that will be required to attain the objective of this book. There is a simple exercise at the end of this chapter.

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- Colour modes ..... 3
- Open Illustrator, create and save a new file ..... 4
- Customise work area ..... 5 – 6
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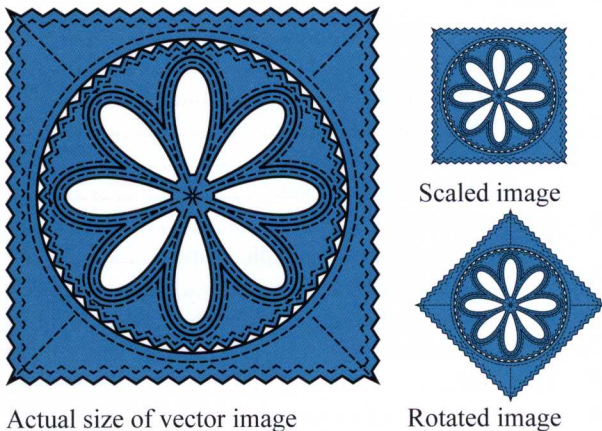
Note: some parts of headings and sub-headings may be summarised.

# VECTOR AND BITMAP IMAGES

All computer images are either bitmap (raster) or vector images. Adobe Illustrator is a vector-based program and Adobe Photoshop is a bitmap-based program. Understanding the difference is fundamental to understanding Adobe Illustrator (AI).

## Vector images:

Vector images are made of lines and curves defined by mathematical objects called vectors. A vector image is created with strokes and fills, points (known as *anchor points* in AI) are joined to create lines (known as *Paths* in AI) and lines are joined to create objects. Vector graphics maintain clarity when scaled, reduced or rotated.



Actual size of vector image

Rotated image

All images in Adobe Illustrator are created in vector, including type. A vector graphic is resolution independent. This means it can be scaled to any size and printed on any output device. The clarity of the image is dependent on the quality of the output device. This makes vector graphics the perfect format for creating detailed technical drawings and fashion illustrations.

## Bitmap images:

Bitmap images are made up of individual pixels. Pixels are defined by a grid – the amount of pixels in an image make up the overall ‘dpi’ of the image or the resolution of the image. 300 dpi means a resolution of 300 dots (or pixels) per inch. The higher the dpi, the higher the resolution, and subsequently the bigger the file. Most Internet pictures are 72 dpi or screen resolution. Most printed images will be 300 dpi or more.

Bitmap images distort badly when they are scaled, reduced or rotated – they lose detail. Bitmap images are good for reproducing subtle gradations of colour and air-brushing techniques. The final image has a softer, more realistic look than a vector image. We use bitmap images in this book to enhance story boards as well as to create realistic texture fills.

Bitmap image



Scaled bitmap image

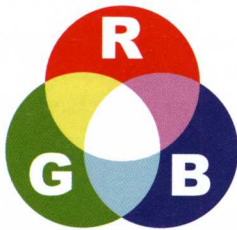


**C**olour modes or colour models – a colour model is any method of representing colour in graphic arts. In graphic arts and printing, colours are often presented using the Pantone system. In computer graphics colours are represented in one of two modes RGB – Red, Green and Blue CMYK – Cyan, Magenta, Yellow and Black.

The choice of colour mode will depend on the end use of the graphics you are creating. If the work you are creating is going to be represented digitally – on the web or on computer – or it is going to be digitally printed, you will use RGB. If the work is going to be printed on a colour plate system CMYK will be used.

**HSB** – hue, saturation and brightness is not a colour model, but can be used when adjusting colours in RGB.

**RGB** is based on reflected light – the light that shines out from a monitor (computer or television). Red, blue and green are ‘additive’ colours and when they are combined the result is white. With **RGB**, what we see represented on the screen will be the closest match to what we see digitally printed.



**CMYK** is based on absorbed light – this is the colour model used when graphics are going to be printed on paper using a plate printing process. The medium (paper) that the colours are printed on absorbs the light and when these three colours are mixed the result is black, or ‘K’.

Colours are created by mixing percentages of cyan, magenta and yellow. Ideally the three colours mixed in equal proportions will create black – this is constrained by the purity of the actual ink and black is added if dark colours cannot be achieved.

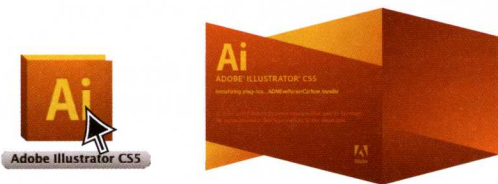


When only solid colours are used in a print that consists of one or two colours, Pantone process colours are used. These are called spot colours.

When many colours and fine gradients are required, four-colour process is the preferred printing method. Colours are created by printing dots of pure colour and black adjacent to each other; our eyes then mix these colours to produce the desired effect. Photographs are usually printed with this process.

Considering that the normal method of printing in the fashion industry is digital, we would recommend working in **RGB** colour mode.

# OPEN ILLUSTRATOR, CREATE AND SAVE A NEW FILE

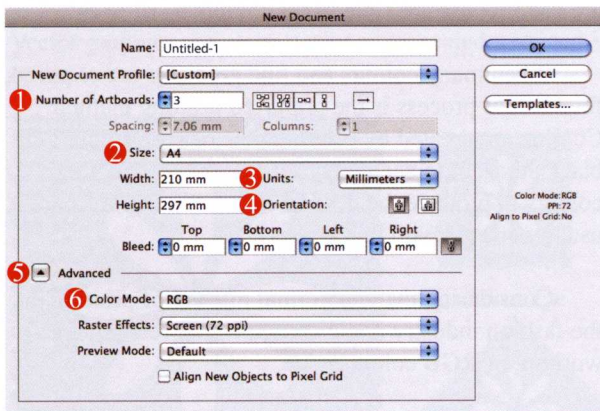


## Open Adobe Illustrator:

- Click onto the **Adobe Illustrator** icon to open the program: **Windows OS – Start up > All Programs > Adobe CS5 > Illustrator**  
**Apple OS – Applications > click onto the AI icon once and then again when the dialogue box opens**

## Step 1: Opening a New File

- Click onto **File** in the menu bar  
↓  
**New Ctrl N/Command N**
- A dialogue box will appear
- 1** Number of Artboards: **3**
- 2** Size: **A4**
- 3** Units: **Millimeters** (or whatever your preference is)
- 4** Orientation: **Portrait** (Portrait icon)
- 5** Click onto **Advanced** if necessary
- 6** Color Mode: **RGB**
- OK**

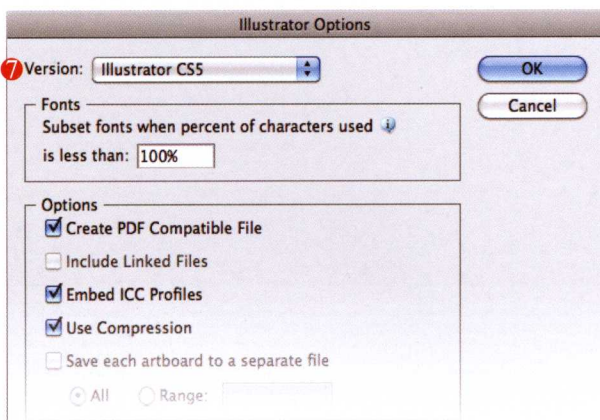
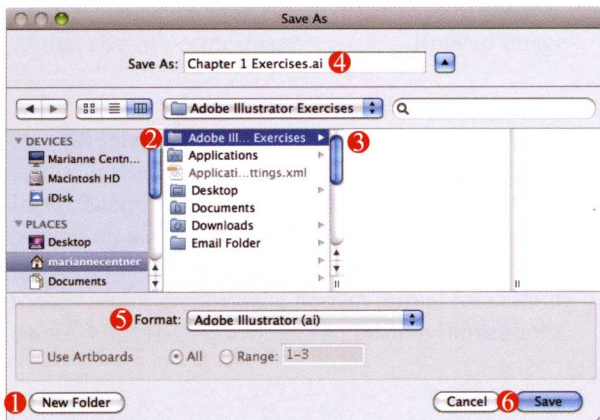


## Step 2: Saving a New File

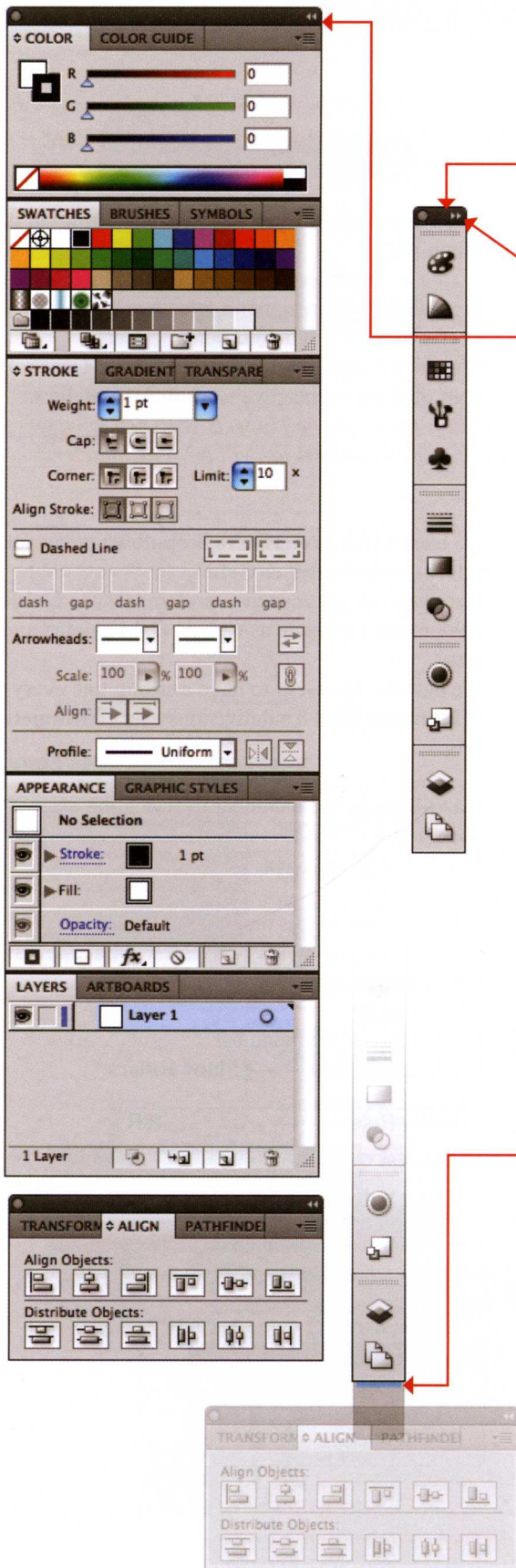
- Click onto **File** in the menu bar  
↓  
**Save File**
- A dialogue box will appear
- Select where you will save the file
- 1** Select **New Folder**
- 2** Name the folder '*Adobe Illustrator Exercises*'
- 3** Click onto the new folder to open the folder
- 4** Type the new file name in the **Save As:** option '*Chapter 1 Exercises*'
- 5** Format: **Adobe Illustrator (ai)**
- 6** **Save** the file
- An **Adobe Illustrator** dialogue box will appear
- You have a choice of which version of Illustrator you want to save the file as
- 7** It is advisable to save the work in the current version as information can be lost when saving to older versions
- If you are giving your work out to another artist it is important to know what version they need and save a copy to that version

*Always keep the original version as a separate file!*

*It is advisable to save the file you are working on every 10 minutes if you can (Ctrl S/Command S).*








## Step 3: Customise the Work Area

- The first time you open AI the work area will be set to 'ESSENTIALS'
- A group of essential panels will be docked in the docking panel
- The panels open in **panel groups**; the groups are separated by a line in the docking panel
- The **panel groups** can be revealed by clicking onto the double arrow in the docking panel
- Conversely, clicking onto the double arrows of the open palettes will dock them again
- Clicking onto individual panels will just reveal that panel as a fly-out
- Selecting another panel will open that panel and the first selection will be re-docked
- You can add extra panels to the docking panel. For example, we always like to have the essentials plus the **Align/ Pathfinder** panel, the **Navigator** panel and the **Type** panel
- Click onto **Window** in the menu bar; a drop-down menu will appear
- Select the following panels:

 **Align**

 **Pathfinder** is linked and will open at the same time as **Align**

 **Navigator**

 **Type** → **Character**

- The new panel can also be docked in the docking panel by clicking onto the title bar, holding the mouse down and dragging the panel to the docking panel
- When a faint blue line appears release the mouse and the panel will dock in that position
- This configuration can now be saved as a customised 'Workspace'
- Go to the top righthand side of the screen and you will see a window with a black down arrow in it

- Click onto this to reveal a drop-down menu
- **Save Workspace**
- Each time you open your program your workspace configuration will be there
- This will be unique to the computer you are working on