Working With Perspective

Photos are 2-dimensional images usually of 3-dimensional objects or scenes. When a photo is taken with a camera there is often some perspective errors due to horizontal or vertical camera tilt. Photoshop provides a range of tools that try to repair these errors whilst retaining the perspective of the image.

Straightening an Image

When you simply want to straighten an image, the RULER TOOL can be used. The RULER TOOL measures the angle of tilt in a photo.
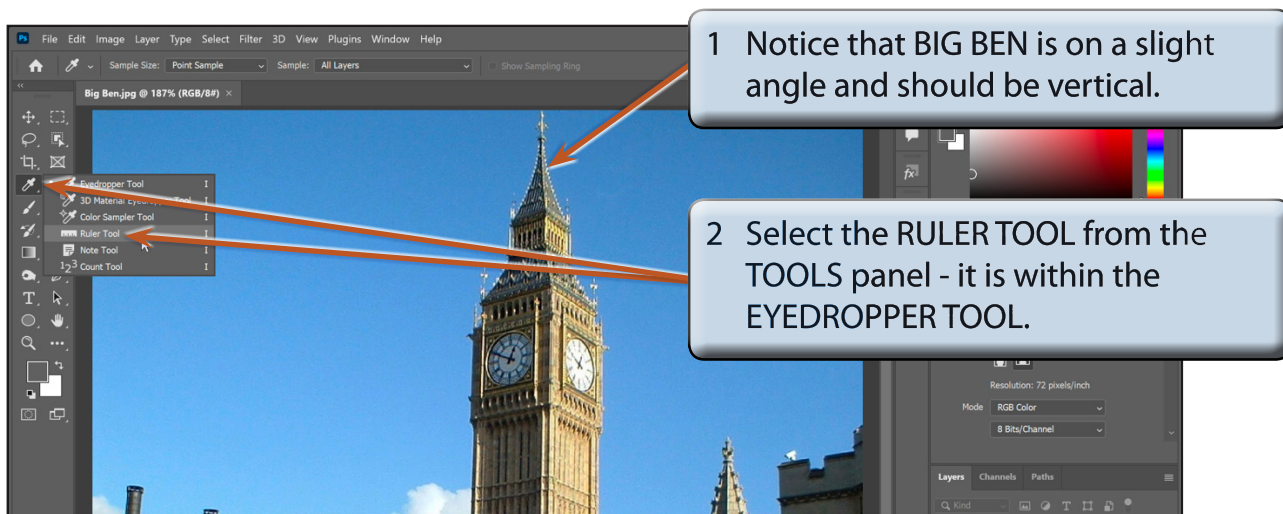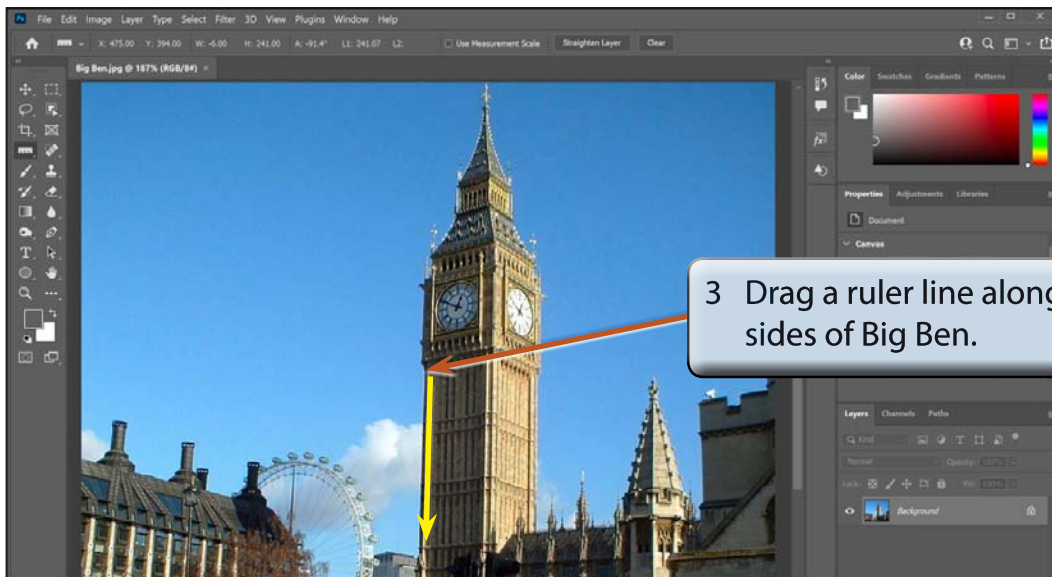
A   Loading the Sample Photo

1   Load Photoshop or close the current file and select OPEN from the WELCOME screen or FILE menu.

2   Access the PScc SUPPORT FILES, open the CHAPTER 22 folder and open the file:

Big Ben

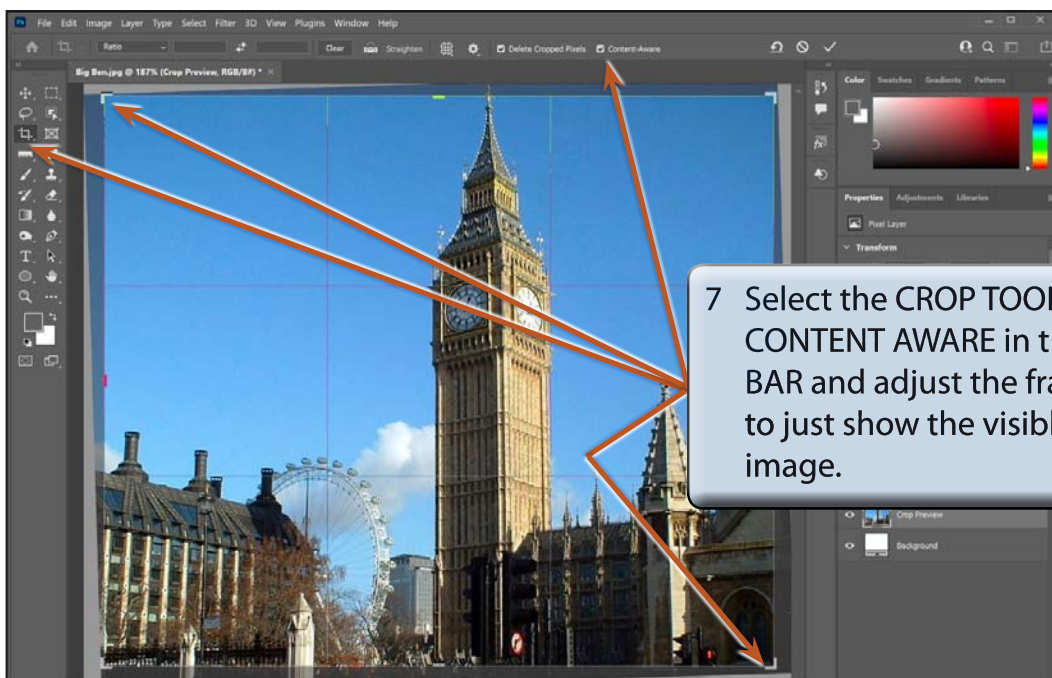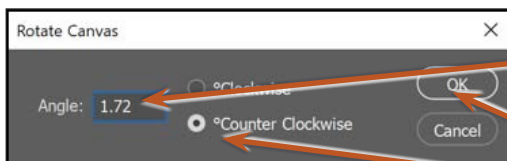3   Press CTRL+0 or COMMAND+0 to set the view to FIT ON SCREEN.

B   Applying the Ruler Tool

1   Notice that BIG BEN is on a slight angle and should be vertical.

2   Select the RULER TOOL from the TOOLS panel - it is within the EYEDROPPER TOOL.

3 Drag a ruler line along one of the sides of Big Ben.

4   Display the IMAGE menu, highlight IMAGE ROTATION and select ARBITRARY.

5 The angle of tilt is measured and displayed in the ANGLE box.

6 Leave °COUNTER CLOCKWISE selected, which is the direction to straighten the image and select OK.

7 Select the CROP TOOL, turn on CONTENT AWARE in the OPTIONS BAR and adjust the frame handles to just show the visible parts of the image.

> **NOTE: You can use the handles to adjust the crop frame so that just parts of the image are selected.**

8   Double click inside the crop frame to complete the crop, then select the MOVE TOOL.

9   Save the image in your STORAGE folder if you wish to.
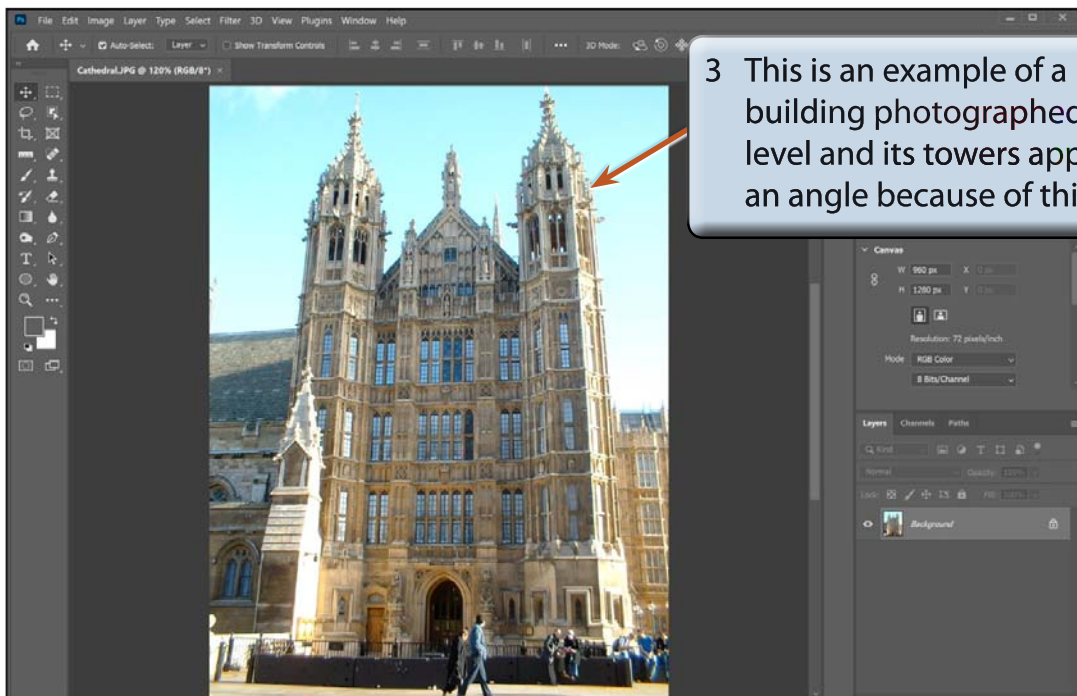
Lens Correction

The LENS CORRECTION filter can be used to minimize distortions created by incorrect camera angles. You can also create some interesting effects with this filter.

A   Loading the Sample Photo

1   Close the BIG BEN file and select OPEN from the WELCOME screen or FILE menu.

2   Access the PScc SUPPORT FILES, open the CHAPTER 22 folder and open the file:
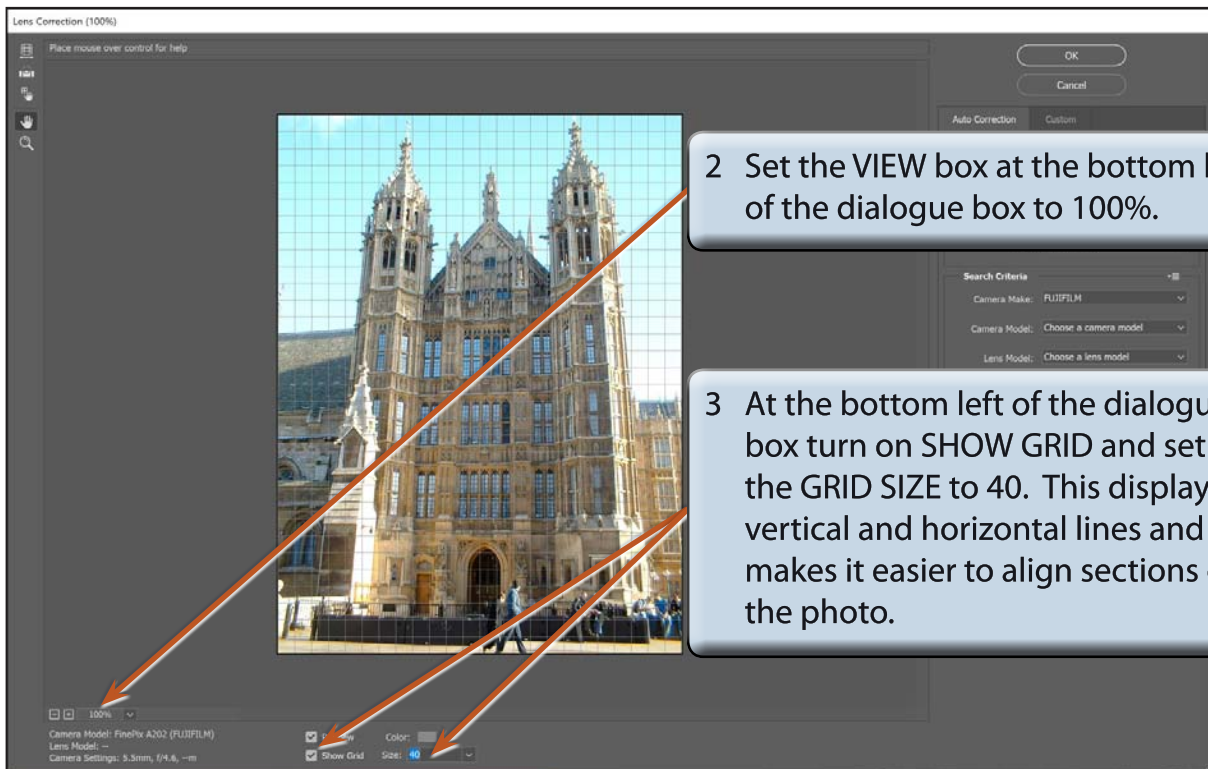
<div align="center">Cathedral</div>

3 This is an example of a large building photographed at ground level and its towers appear to be on an angle because of this.

4   The LENS CORRECTION filter can be used to reduce this effect.

B   Applying the Lens Correction Filter

1   Display the FILTER menu and select LENS CORRECTION to open the LENS CORRECTION dialogue box.

2   Set the VIEW box at the bottom left of the dialogue box to 100%.

3   At the bottom left of the dialogue box turn on SHOW GRID and set the GRID SIZE to 40. This displays vertical and horizontal lines and makes it easier to align sections of the photo.

NOTE: The LENS CORRECTION tools are at the top left of the dialogue box and the PROPERTIES panel is at the right.