OBLIQUE PROJECTION

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OBLIQUE PROJECTION

1. INTRODUCTION TO OBLIQUE PROJECTION

2. DRAWING CIRCLES AND CYLINDERS IN OBLIQUE

3. DRAWING A CAMERA IN OBLIQUE PROJECTION

INTRODUCTION TO OBLIQUE PROJECTION

Oblique projection is a method of drawing objects in 3 dimensions. It is quite a simple technique, compared to isometric or even perspective drawing. However, to draw accurately in oblique projection traditional drawing equipment is normally required, as seen below.

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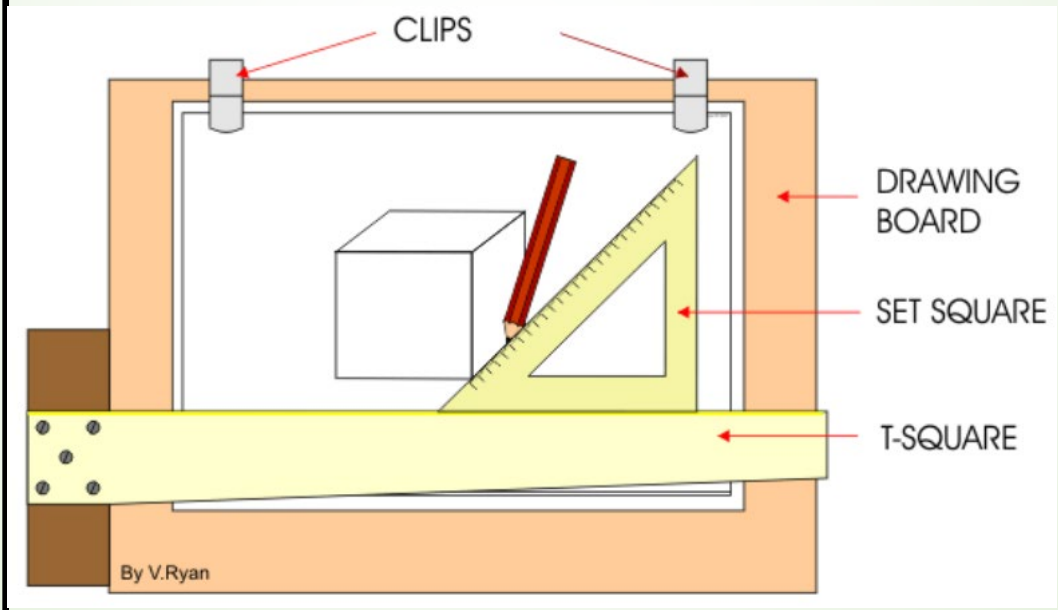

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Tap the red button to return to the Contents page

OBLIQUE PROJECTION

The technique for drawing a cube in oblique projection is outlined on the next few slides.

To draw it correctly in oblique projection three main rules must be followed:

1. Draw the front or side view of the object.
2. All measurements drawn backwards are half the original measurement.
3. 45 degrees is the angle for all lines drawn backwards

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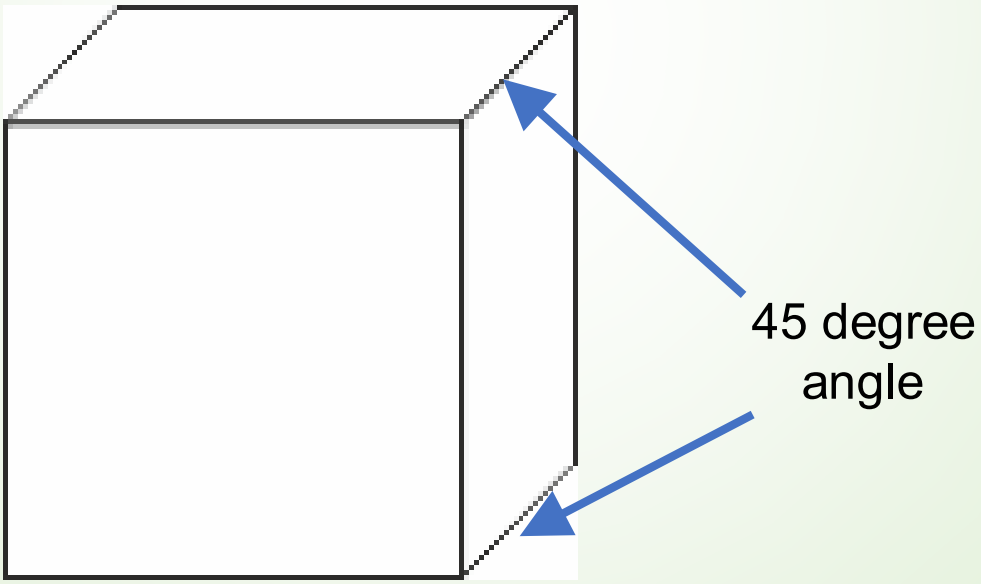

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Tap the red button to return to the Contents page

DRAWING IN OBLIQUE PROJECTION

A. Draw the front view. Remember to use a T-square and 45 degree set square.

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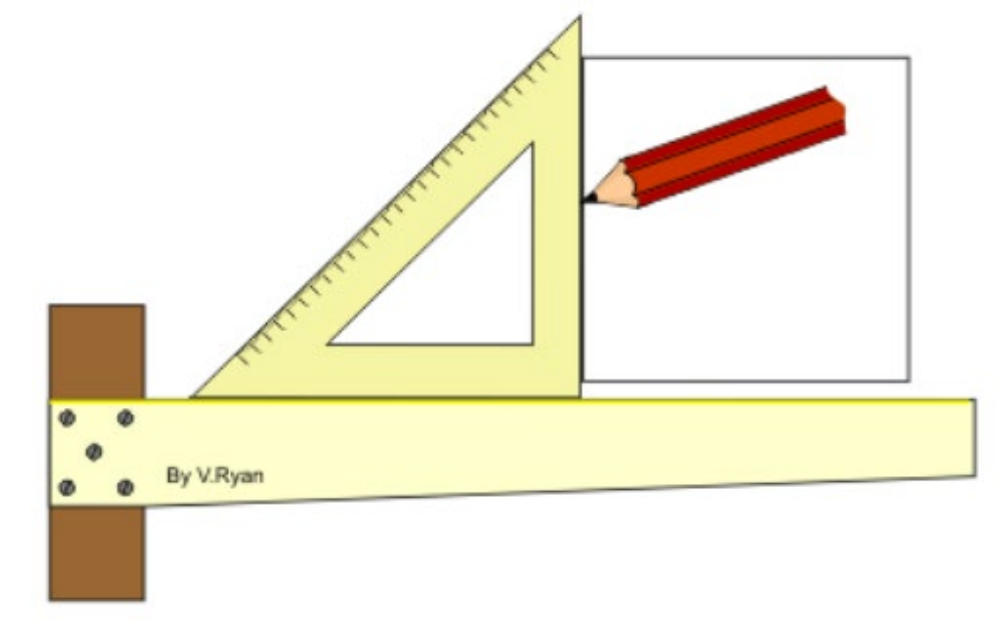

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Tap the red button to return to the Contents page

DRAWING IN OBLIQUE PROJECTION

B. Draw 45 degree lines from each corner of the square. The distance of any lines drawn back at 45 degrees should be halved. For example, a cube may have sides of 100mm but they must be drawn 50mm in length. This should mean that the cube will look more realistic and in proportion.

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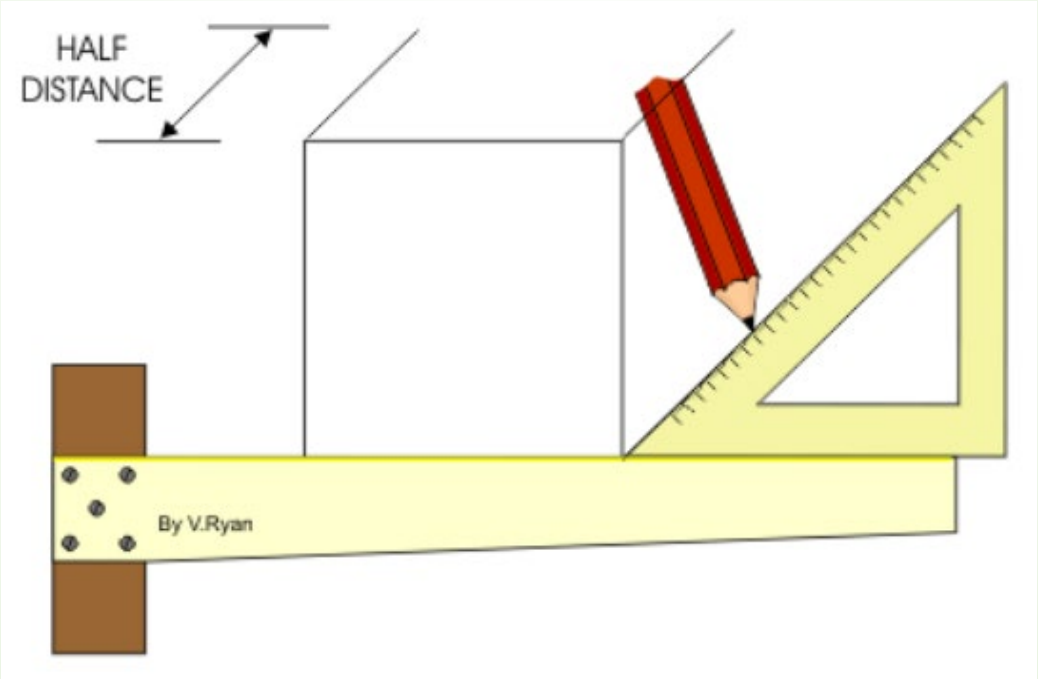

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Tap the red button to return to the Contents page

DRAWING IN OBLIQUE PROJECTION

C. Draw 45 degree lines from each corner of the square. The distance of any lines drawn back at 45 degrees should be halved. For example, a cube may have sides of 100mm but they must be drawn 50mm in length. This should mean that the cube will look more realistic and in proportion.

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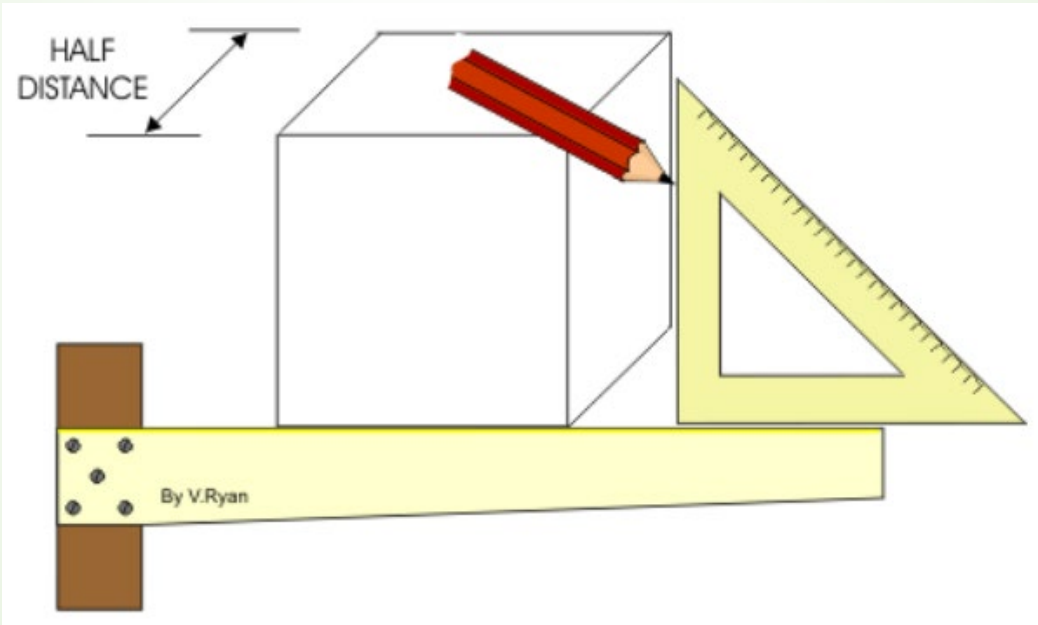

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Tap the red button to return to the Contents page

DRAWING IN OBLIQUE PROJECTION

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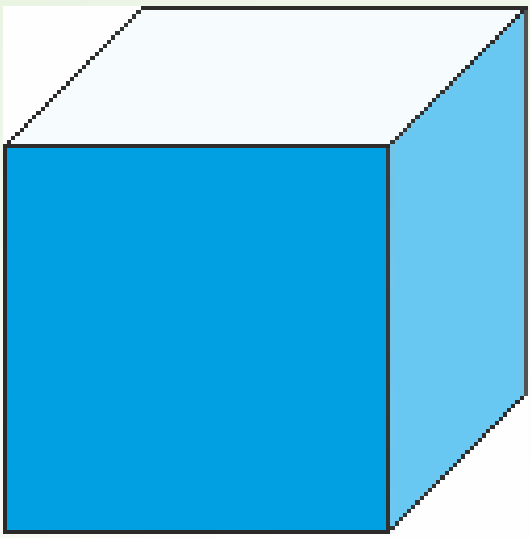

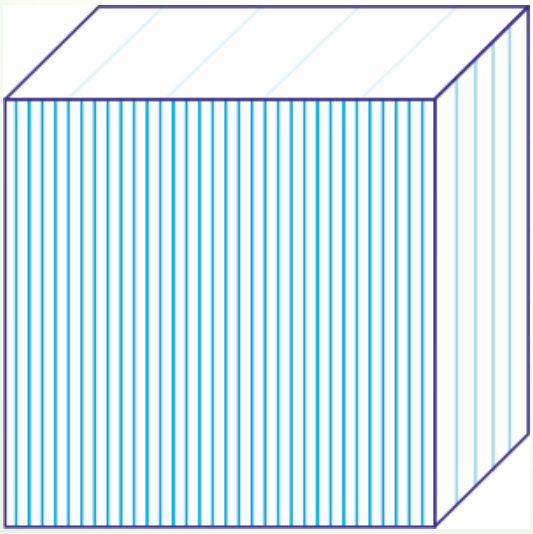

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DRAWING CIRCLES AND CYLINDERS IN OBLIQUE

Drawing cylinders in oblique projection is quite simple, if the stages outlined on the next few slides are followed. In comparison with other ways of drawing cylinders (for example, perspective and isometric) using oblique projection is relatively easy. It is important that this techniques is mastered, in order to progress to more complex drawings.

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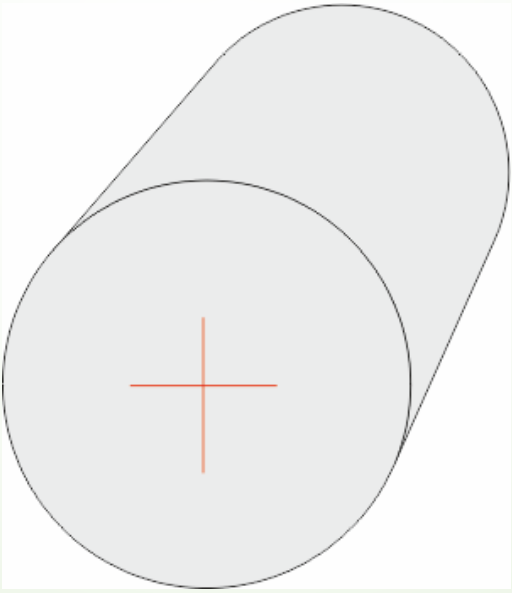

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Tap the red button to return to the Contents page

CIRCLES AND CYLINDERS

STAGE ONE: Draw a vertical and horizontal centre lines to indicate the centre of a circle, then use a compass to draw the circle itself.

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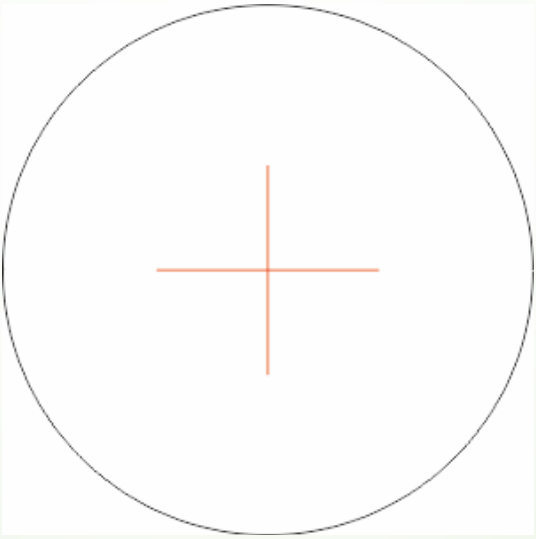

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Tap the red button to return to the Contents page

CIRCLES AND CYLINDERS

STAGE TWO: Draw a 45 degree line to match the length on the cylinder. At the end of this line draw vertical and horizontal centre lines. Remember the general rule for oblique is to half all distances projected backwards. If the cylinder is 100mm in length the distance back must be drawn to 50mm.

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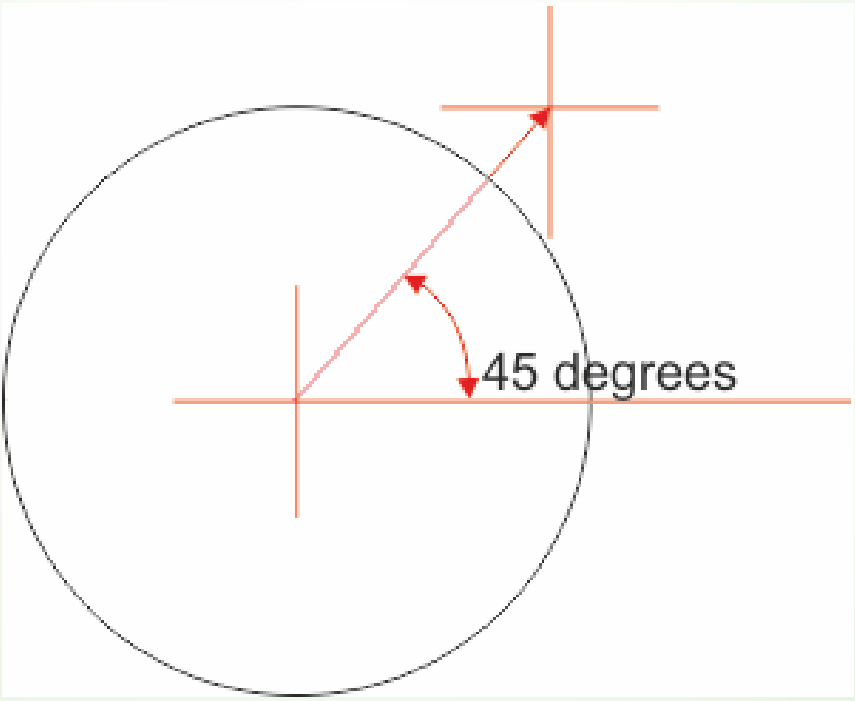

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Tap the red button to return to the Contents page

CIRCLES AND CYLINDERS

STAGE THREE: Draw the second circle with a compass.

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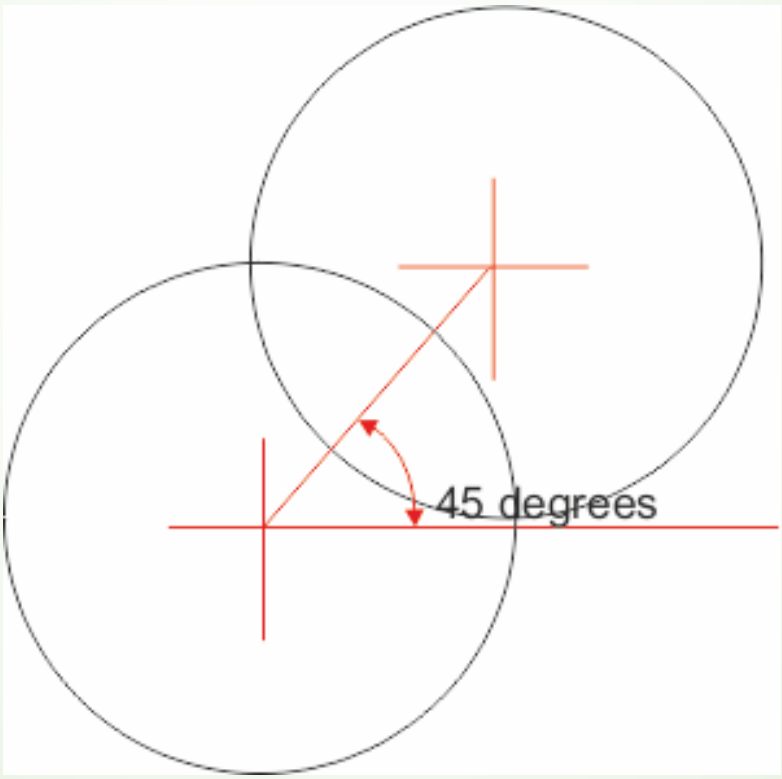

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Tap the red button to return to the Contents page

CIRCLES AND CYLINDERS

STAGE FOUR: Draw two 45 degree lines - to join the front and back circles.

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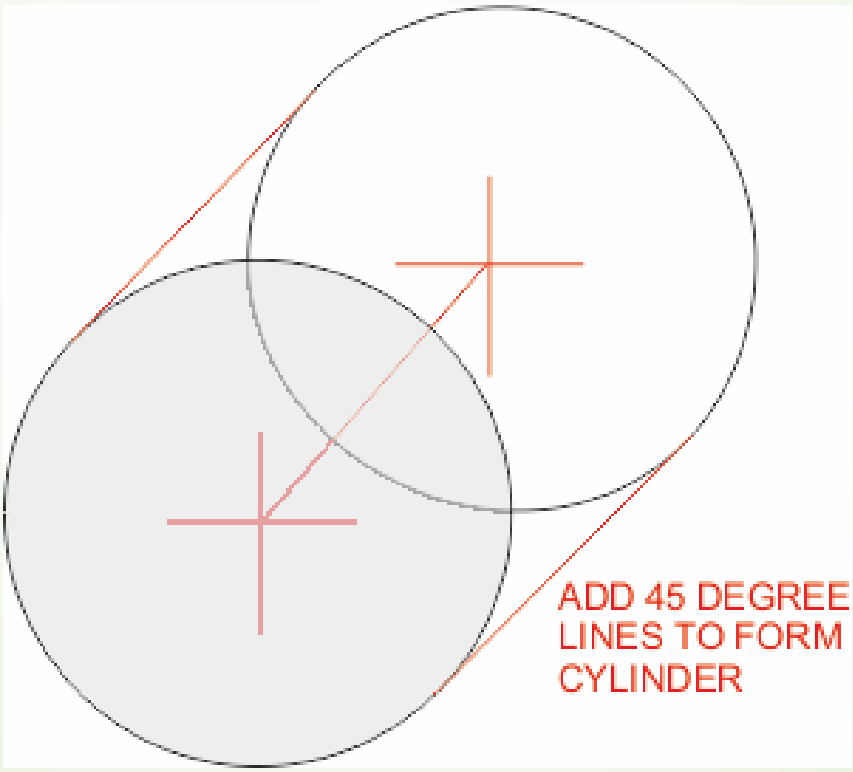

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Tap the red button to return to the Contents page

CIRCLES AND CYLINDERS

STAGE FIVE: Go over the outline of the cylinder with a fine pen or sharp pencil. Add shade - if required.

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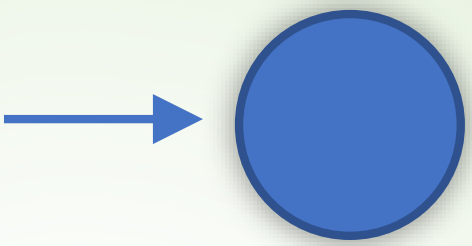

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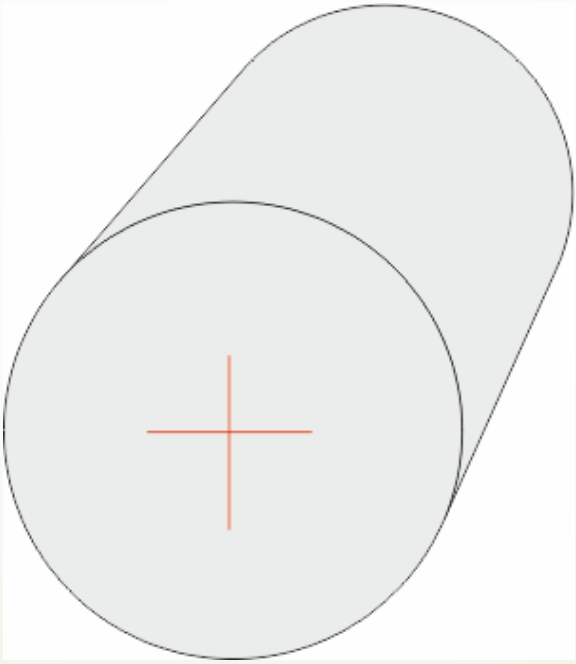

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DRAWING A CAMERA IN OBLIQUE PROJECTION

A basic digital camera is drawn below. The next slides show the stages involved in drawing this product in oblique projection.

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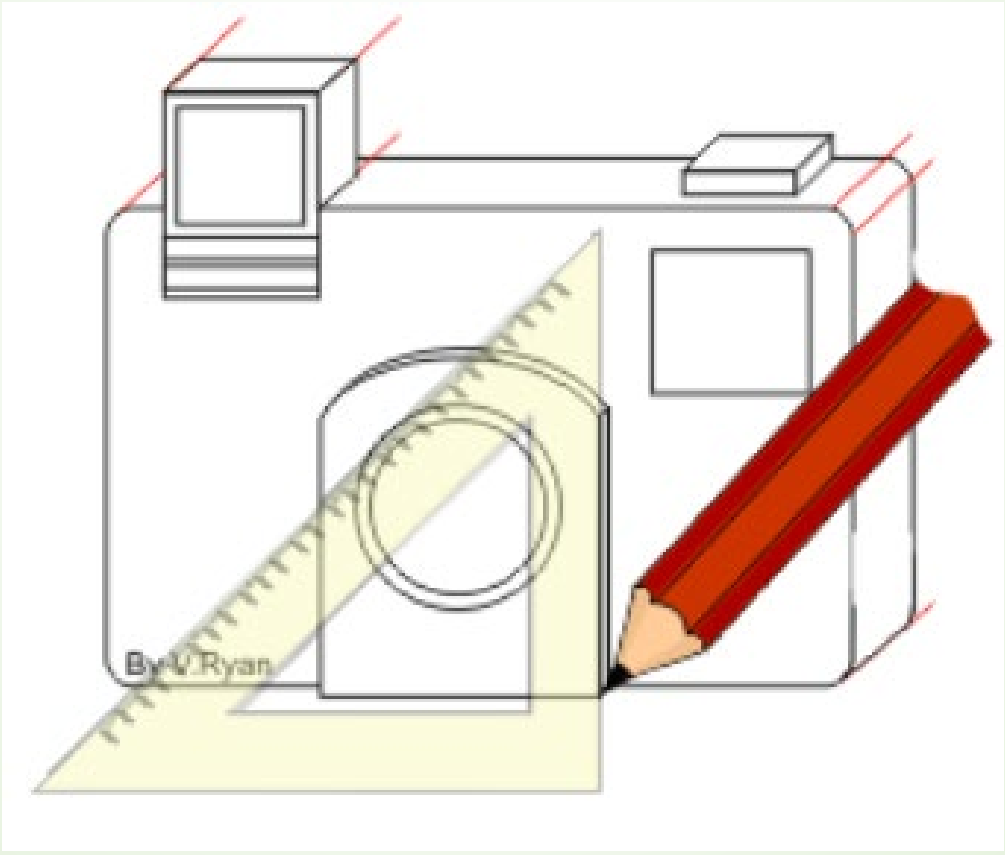

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Tap the red button to return to the Contents page

1. Draw the basic shape of the camera starting with a basic cube.

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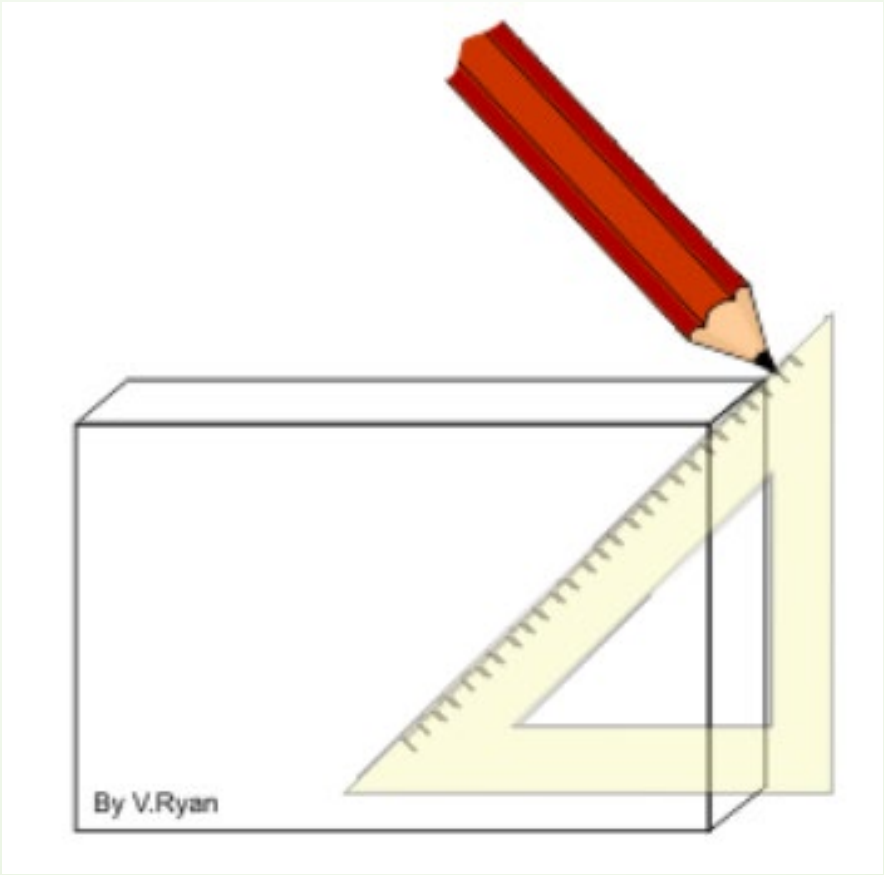

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Tap the red button to return to the Contents page

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2. Add detail such as the flash and eye piece.

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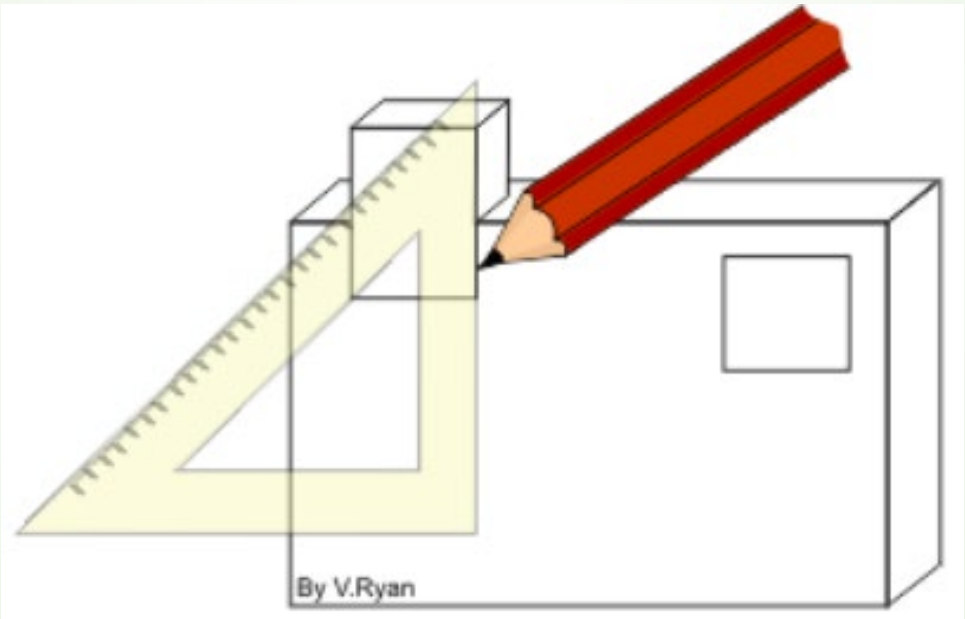

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Tap the red button to return to the Contents page

3. Next draw the button

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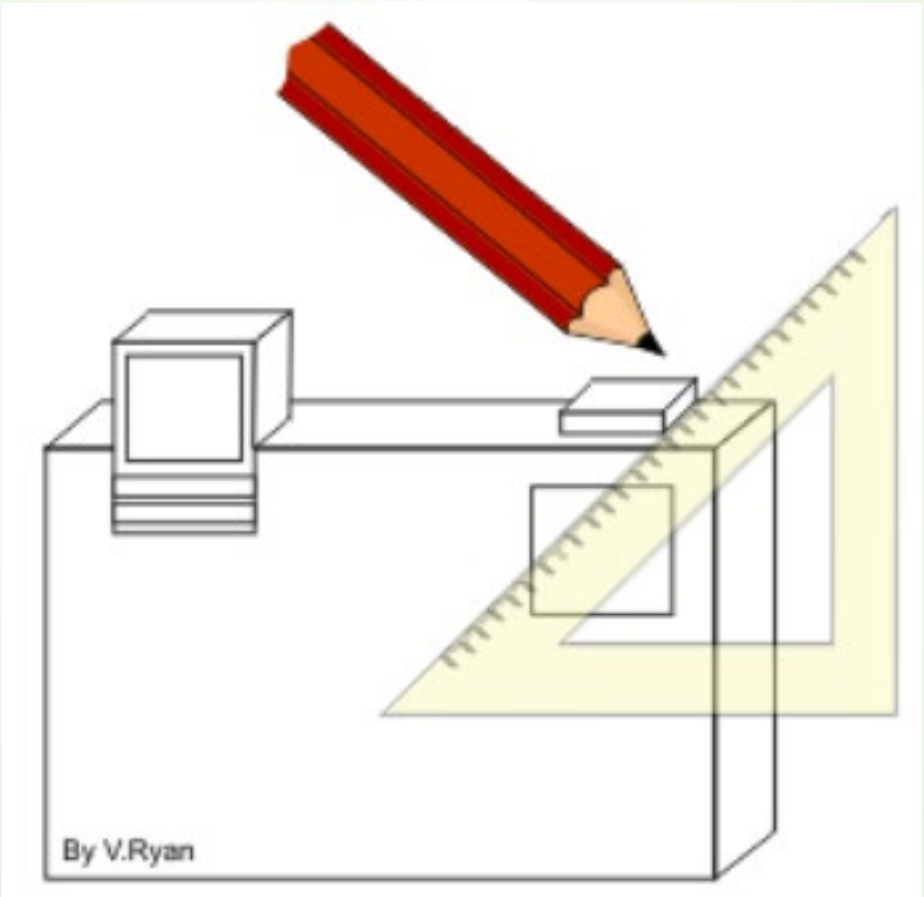

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4. Draw the front of the lens - use a compass for the circular part.

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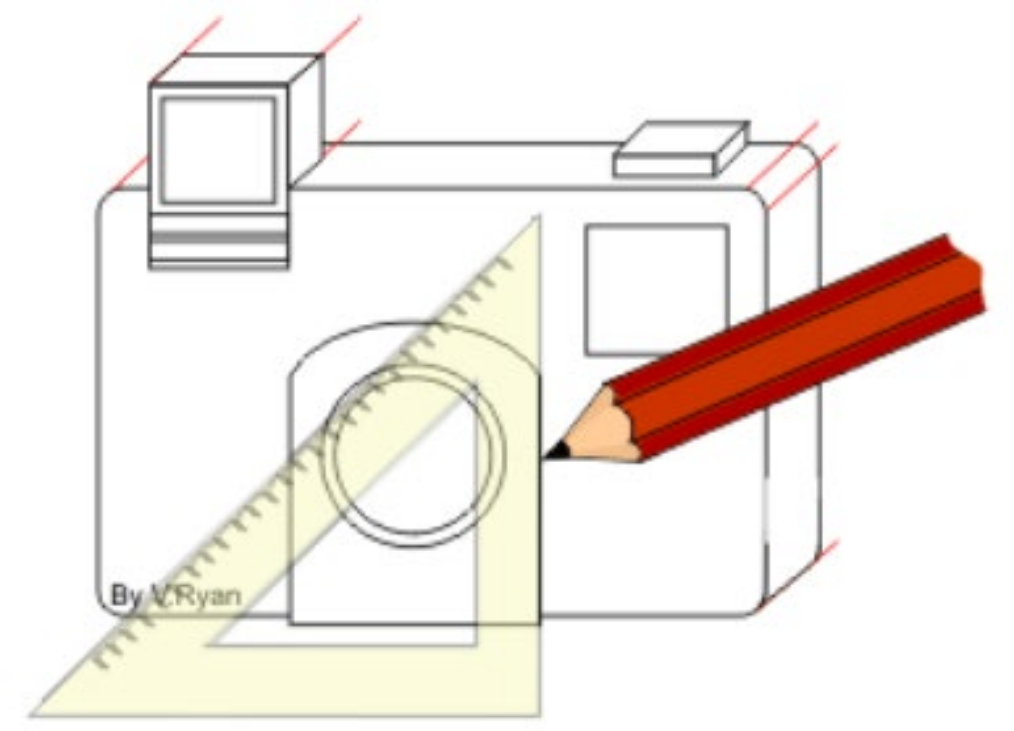

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5. Add thickness to the lens and the camera is complete. Colour and shade can be added to enhance the final presentation.

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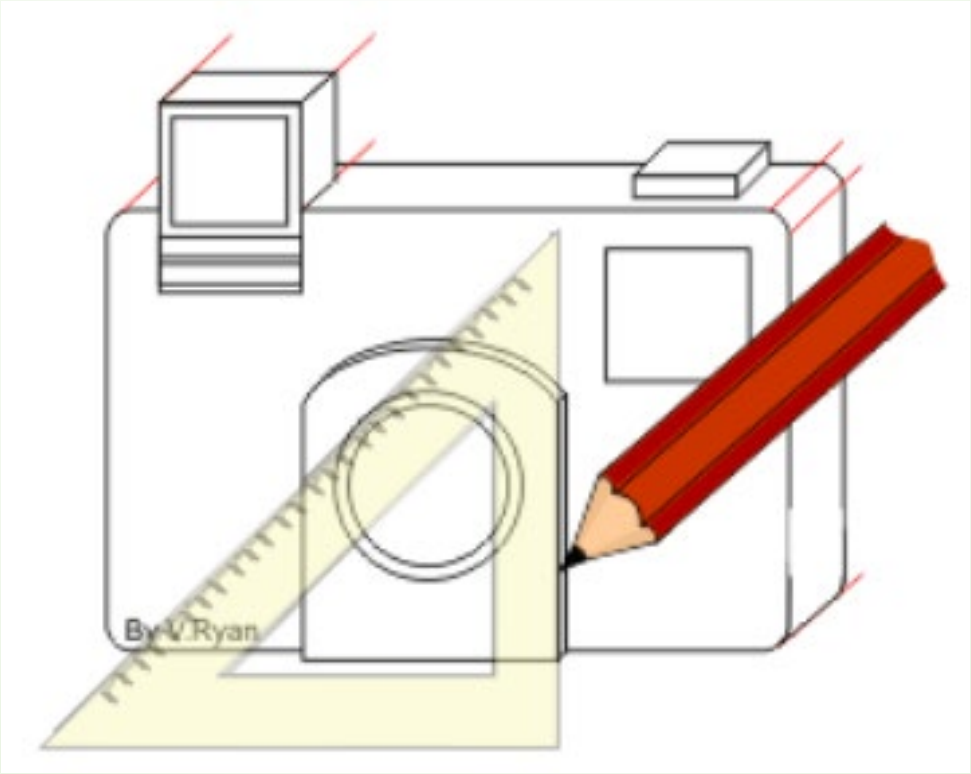

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Example of shading shown below, on a slightly different product.

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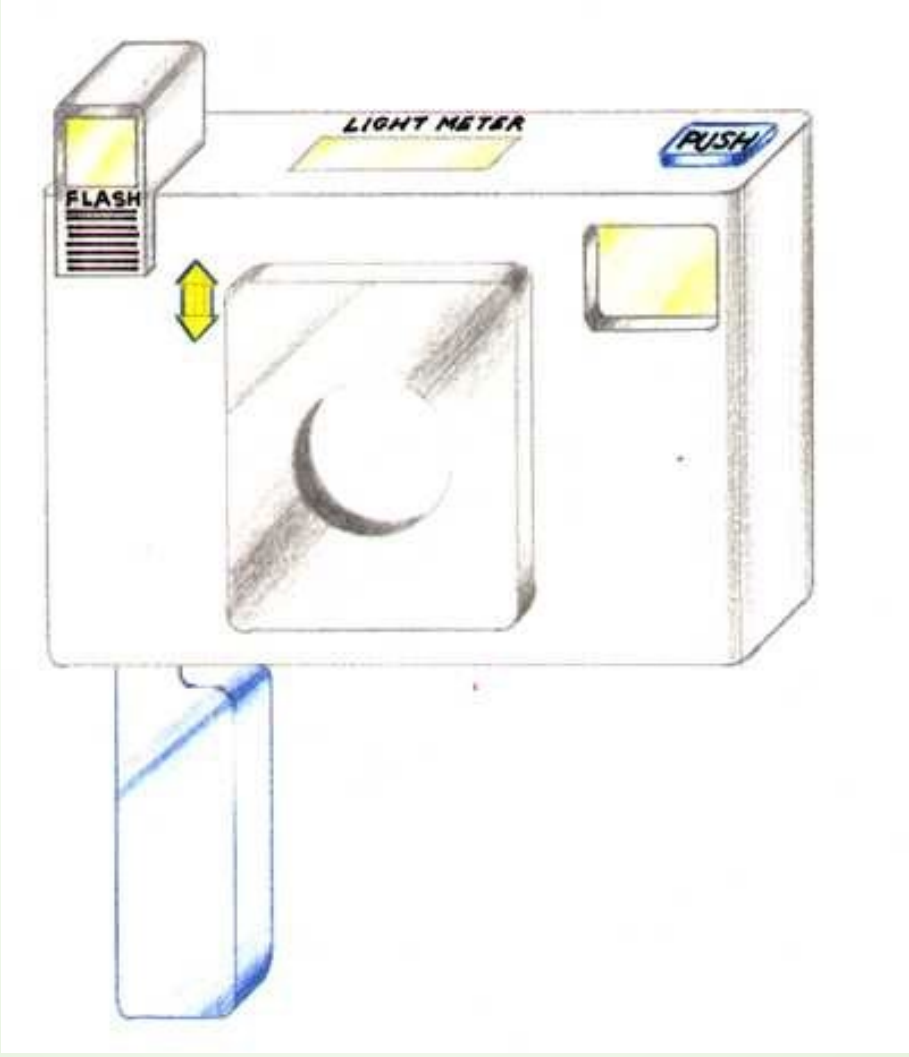

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