

USING T-SQUARES AND SET SQUARES

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USING T-SQUARES AND SET SQUARES

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1. SETTING UP PAPER ON A DRAWING BOARD ACCURATELY

2. BASIC USE OF A T-SQUARE AND SET SQUARE

3. PRINTING ACCURATELY IN BLOCK CAPITALS

4. PRINTING IN LOWER CASE LETTERS

5. DRAWING ANGLES WITH SET SQUARES

6. EXERCISES WITH T-SQUARES AND SET SQUARES

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WHY IT IS IMPORTANT TO SET UP THE PAPER ACCURATELY ON A DRAWING BOARD?

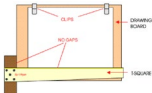
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In order to draw accurate working drawings and construction drawings, the blank paper must be set up on a drawing board very carefully.

An engineer / architect, will always take the time to set up the paper. This ensures that the resulting design / drawing, looks precise and professional, after it has been constructed with T squares and set squares.

If the drawing paper is not set up 'straight' on the drawing board, any lines that are added with a T square / set square will look inaccurate and unprofessional.

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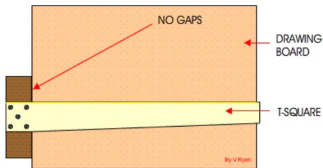


SETTING UP PAPER ON A DRAWING BOARD ACCURATELY

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1. The T-square must be placed up against the edge of the drawing board. There must be no gaps, otherwise the paper will not be set up correctly and drawing accurate horizontal and vertical lines will be impossible.

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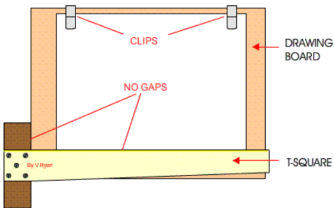


SETTING UP PAPER ON A DRAWING BOARD ACCURATELY

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2. The paper is then allowed to rest on the T-square. Check that the paper rests properly on the T-square and that there are no gaps between the T-square and the paper OR the T-square and the side of the drawing board. The clips can then be positioned holding the paper securely to the board.

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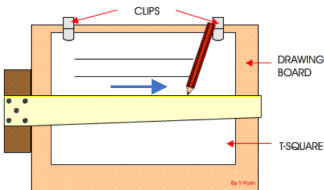
HORIZONTAL LINES USING A T-SQUARE

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A 2H pencil can then be used to draw faint horizontal lines across the page. Try to keep the lines to the same size by measuring them with a ruler.

Each time you draw a line check that the T-square is pressed completely against the edge of the board. There should be no gaps.

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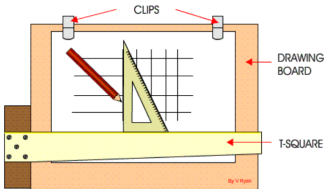
USING A T-SQUARE AND SET SQUARE FOR VERTICAL LINES

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To draw vertical lines a T-square and set square are used together.

Be careful to check that there are no gaps between the T-square and the board AND the set square and the T-square. Do not draw vertical lines with a set square only as they will not be accurate.

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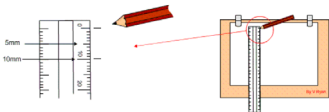


PRINTING ACCURATELY IN BLOCK CAPITALS

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1. The paper should be set up on the drawing board using the correct technique. Then, use a ruler to measure a 10mm gap near the top of the page.

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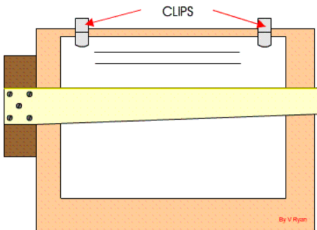


PRINTING ACCURATELY IN BLOCK CAPITALS

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2. Carefully use a T-square to draw the horizontal lines across the top of the page. The lines should be faint and drawn with a 2H sharp pencil and be 10mm apart. These are called guidelines. Check the T-square is pressed against the edge of the drawing board when drawing the lines.

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PRINTING ACCURATELY IN BLOCK CAPITALS

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3. In BLOCK CAPITALS print the title "printing exercise". Keep the printing as precise as possible and plain - not a fancy style.

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PRINTING EXERCISE



By V Ryan

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PRINTING ACCURATELY IN BLOCK CAPITALS

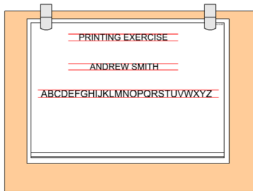
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4. Lower down the paper, draw two more lines 10mm apart, with a T-Square and print your full name, again in BLOCK CAPITALS.
5. Lower down the paper, draw two more lines 10mm apart and print the full alphabet.

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ANDREW SMITH

ABCDEFGHIJKLMNOPQRSTUVWXYZ



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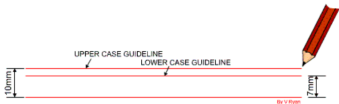
PRINTING - LOWER CASE LETTERS

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Sometimes printing in upper and lower case letters is required. The techniques for printing in this way accurately, is shown below.

Draw three guidelines to the exact measurements, with a T-Square. This time print your name in Upper and Lower case letters. Look carefully at the measurements, the lower case guideline more than half the measurement of the Upper Case Guideline

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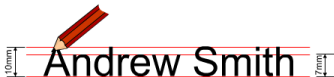


PRINTING - LOWER CASE LETTERS

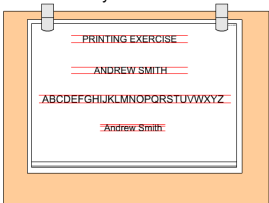
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Print the letters very carefully and keep to a plain and simple style. Fancy or elaborate styles are not required at this stage.

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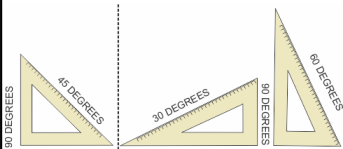


DRAWING ANGLES WITH SET SQUARES

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Set squares are used in conjunction with T-squares to draw accurate angles. There are two main types of set square. One has an angle of 45 degrees and the other 30/60 degree angles.

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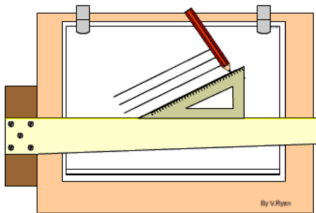


DRAWING ANGLES WITH SET SQUARES

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Set squares are only accurate, if they are used with a T-square. The set square must rest on the T-square which should be pushed against the edge of the board. If the T-square is not right against the edge of the board (if there are even small gaps) lines drawn at an angle will not be accurate.

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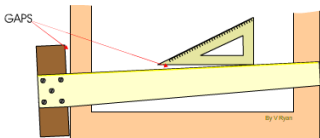


DRAWING ANGLES WITH SET SQUARES

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Common errors when using T-squares and set squares are that gaps are allowed to develop between the T-square and the edge of the board or the set square and the T-square. This leads to inaccurate drawing with angles being incorrect.

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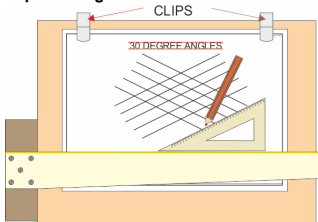
EXERCISES WITH T-SQUARES AND SET SQUARES

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Set up a piece of A4 paper on a drawing board using a T-square to ensure the paper positioned correctly. Use clips to fix the paper to the board. Add the title '30 DEGREE ANGLES', in BLOCK CAPITALS.

Draw a number of lines at 30 degrees and then 'flip' the set square round to draw 30 degree lines in the opposite direction.

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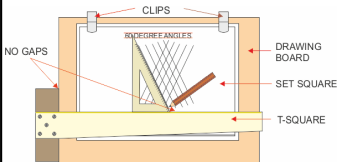


EXERCISES WITH T-SQUARES AND SET SQUARES

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Draw a number of lines at 60 degrees and then 'flip' the set square round to draw 60 degree lines in the opposite direction.

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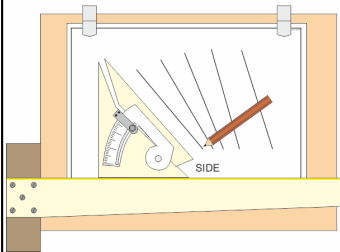


EXERCISES WITH T-SQUARES AND SET SQUARES

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Adjustable set squares allow a range of angles to be drawn accurately. They can be adjusted to a variety of angles which means only one set square is required. Try the exercise below.

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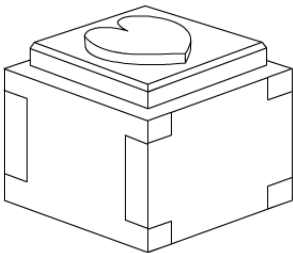


MORE COMPLEX EXERCISE

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Using a T-square and 30/60 degree set square, try the exercise below. Tap/click on the image below for full details.

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