

# K & E Short Base Triangulation

Courtesy of John Hunt Snr. from the UKSRC *Gazette* Issue 12, 2011.

## Examples of use for the Short Base Triangulation Slide Rule.

Figure 8, Figure 9 and Table 1 give two examples of range calculation. Referring to the equation R in Figure 6; all that is necessary to find the range are values of "A", "t" and "b". Simply align "t" on the slider opposite "A" and then the range, R, is read opposite the value for "b". No cursor is necessary, only position the cursor when there is a need to convert yards to metres.

The third example is a standard multiplication and division.

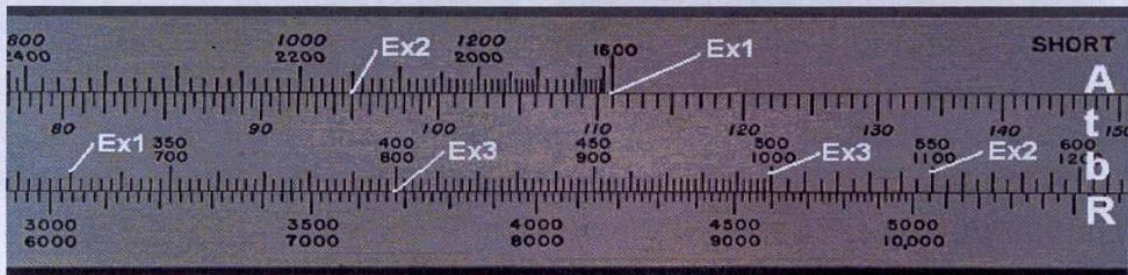


Figure 8

Figure 9 is solely for orientation of examples Ex1 and Ex2; the sketches are not scale.

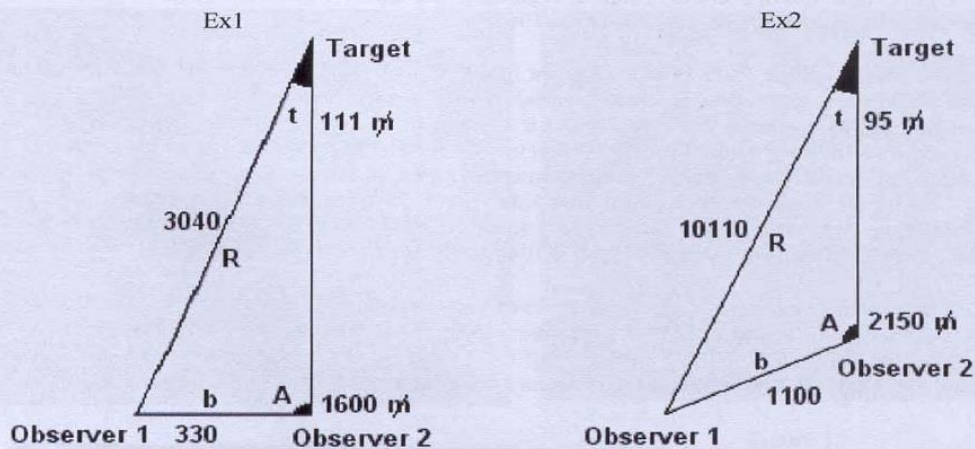


Figure 9

	Ex1	Ex2		Ex 3	Ex3
Auxiliary Angle (A)	1600 mils	2150 mils	Division	7360/800	9.2
Vertex Angle (t)	111 mils	95 mils			
Base (b)	330 units	1100 units	Multiplication	460 x 80	36800
Range (R)	3040 units	10110 units			
Actual range	3034 units	10131 units			

Table 1

In the triangulation examples, Ex1 and Ex2, the upper scale of "R" refers to the upper scale of "b" and the lower scale of "R" refers to the lower scale of "b".

In the division/multiplication example of Ex 3 care must taken to only read the lower numbers of the "b" scale.