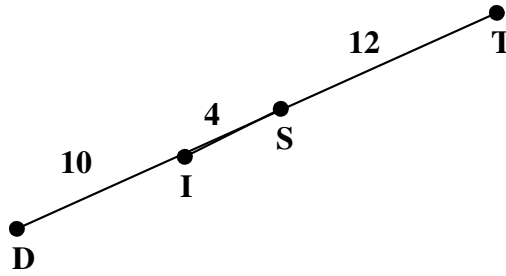


Notes for Lessons 7-1 and 7-2

Ratios can be written in three forms. They can be written as a fraction, with a :, or with the word 'to' between the numbers being compared and they should always be written in simplest form. For example, if you are making oatmeal for breakfast and the instructions say to use three cups of oatmeal with two cups of water the ratio of water to oatmeal would be $\frac{2}{3}$, or 2:3, or 2 to 3.

Ex 1: Use the measurements on the given line to find the following ratios in simplest form.

1) DI:IS	10 : 4	5 : 2
2) ST:DI	12 : 10	6 : 5
3) IT:DT	16 : 26	8 : 13
4) DI:IT	10 : 16	5 : 8
5) IT:DS	16 : 14	8 : 7
6) IS:DI:IT	4 : 10 : 16	2 : 5 : 8



Ex. 2: A poster is 1 m long and 52 cm wide. Find the ratio of the width to the length.

$$52 : 100$$

$$13 : 25$$

Ex. 3: The measures of three angles of a triangle are in the ratio 2: 2: 5. Find the measure of each angle.

$$2x + 2x + 5x = 180$$

$$9x = 180$$

$$x = 20$$

$$\angle 1 + \angle 2 = 40^\circ$$

$$\angle 3 = 100^\circ$$

Ex. 4: Use the given figure and the fact that $\frac{KR}{RT} = \frac{KS}{SU}$ to fill in the table.

KR	RT	KT	KS	SU	KU
12	9	21	16	12	28
8	2	10	12	3	15
16	8	24	20	10	30

$$\frac{16}{x} = \frac{20}{10}$$
