

4. PERCENTAGES

Call the outer scale 'percentage' and the inner scale 'the units you are using'. The 11 on the outer scale could be 11% or 110%. The decimal point is put in the answer accordingly. The 20 could be 20%, 2%, or 200%.

Example: You have 80 units and you want to increase this by 20%. As 80 represents 100% of the number you have, put 80 under 100% on the outer scale (10). Under 20% on the outer scale, read the answer 16 on the inner scale.

Also to increase 80 by 20%, you would have a new total of 120% of 80. Under the 120% (12), the answer is 96 on the inner scale.

Example: \$92 is a price including 15% tax. What is the price less tax?

\$92 is 100% + 15% tax; therefore, \$92 is 115% of the price less tax. Under 115% on the outer scale, put 92 on the inner scale. Read at 100% \$80 and at 15% \$12. Price without tax \$80, 15% tax \$12.

5. PROPORTIONS

Example 1. 3 is to 9 as 4 is to ?

Set 3 (30) on the outer scale over 9 (90) on the inner scale. Under 4 (40) on the outer scale read answer 12 on the inner scale.

Example 2.

If 5 men dig 20 holes in 3 hours, how long will it take for 7 men to dig 14 holes?

Set 5 on the outer scale over 20 on the inner scale. Opposite 3 on the inner scale read 75 on the outer scale. Keep the 75 as a reference and set 7 on the outer scale over 14 on the inner scale. Under 75 read the time 15 which would be 1.5 hours.