

### Distance in Chains and Paces

A chain is equal to 66 feet and is the basic unit for measuring distances in fire-control work. There are 80 chains in 1 mile.

A pace is the distance on level ground between the heel of one foot and the heel of the same foot where it next touches the ground while walking normally (two normal steps). As everyone's pace differs, it is important to determine one's individual pace length.

Walking a chain or chaining - To walk a chain, measure several chains on level ground with a steel tape, marking each chain with a stake. Walking normally from one stake to the other, count the paces. Divide by the number of chains that were measured off to get the number of paces per chain. A person's pace will change depending on whether pacing is uphill or downhill. In these situations, the number of paces per chain will need to be recalculated as above.

Example 1 - Victor marks off 3 chains or 198 feet ( $66 \text{ feet} \times 3 = 198 \text{ feet}$ ). He walks the distance in 36 paces. How many paces per chain is this? What is the length of each pace?

$36 \text{ paces} / 3 \text{ chains} = 12 \text{ paces} / \text{chain}$

Set up the appropriate unit cancellation (see Chapter 2, Section 2.1) using 1 chain = 66 feet and solve for length of each pace.

The length of Victor's pace is  $5 \text{ \& } 1/2$  feet.