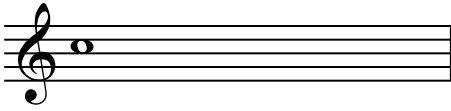


# RHYTHM AND DURATION

The rhythmic duration of notes is similar to fractions in math.  
A WHOLE NOTE equals the number 1:

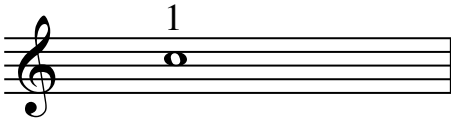


A HALF NOTE is equal to half of 1, so two half notes equal one whole note ( $1/2 + 1/2 = 2/2$  or 1):



$$1/2 + 1/2$$

=

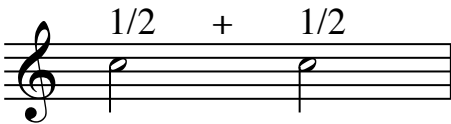


A QUARTER NOTE is equal to one fourth of 1, so four quarter notes equal one whole note AND two quarter notes equal one half note ( $1/4 + 1/4 + 1/4 + 1/4 = 4/4$  or 1, AND  $1/4 + 1/4 = 2/4$  or  $1/2$ ):



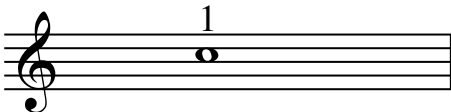
$$1/4 + 1/4 + 1/4 + 1/4$$

=



$$1/2 + 1/2$$

=



1

We may continue the process until reaching 1/16 and even beyond:

1

$2/2 = 1$

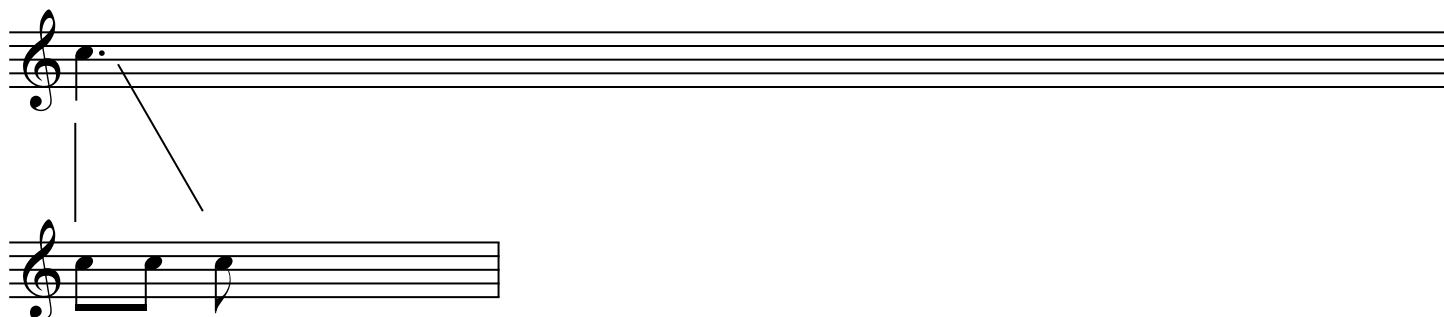
$2/4 = 1/2$   $4/4 = 1$

$2/8 = 1/4$   $8/8 = 1$

$2/16 = 1/8$   $16/16 = 1$

A DOT may be added to the right of a note. The dot adds the half the value of the note to the total duration.

For example, a dotted quarter note equals the equivalent of three eighth notes ( $1/4=2/8$ ,  $2/8+1/8=3/8$ ):



When a silence is desired instead of a note, RESTS are used. Here are the RESTS and their equivalent note values:

WHOLE rest	WHOLE note	HALF rest	HALF note	QUARTER rest	QUARTER note	EIGHTH rest	EIGHTH note
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SIXTEENTH rest	SIXTEENTH note	THIRTY-SECOND rest	THIRTY-SECOND note	SIXTY-FOURTH rest	SIXTY-FOURTH note
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RESTS are usually not dotted.

TIES may also be used to make the rhythmic duration of a note longer. The value of the second note in the TIE is added to the first. RESTS ARE NEVER TIED.

A TIE connects a notehead to a notehead. Here are some example of TIES:

WHOLE note	+	HALF note	HALF note	+	QUARTER note	QUARTER note	+	EIGHTH note
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$1=2/2$	+	$1/2$	$=3/2$	$1/2=2/4$	+	$1/4$	$=3/4$	$1/4=2/8$	+	$1/8$	$=3/8$
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