

# Basic Polyrhythms

The following examples represent different polyrhythmic combinations up to 7 beats. Each polyrhythm is described as a ratio  $x:y$ . The number  $X$  is going to show us the superimposed beats and the number  $Y$  will show the original pulse. So for example  $4:3$  will mean that we have 4 beats superimposed over 3 beats.

In order to master each polyrhythmic figure it is extremely important to be able to subdivide the main beat. The superimposed beat ( $X$ ) will then be created by accenting or playing only each  $Y$  number of subdivisions.  $X$  gives us the type of subdivision which we have to use. For example, in  $4:5$  we need to subdivide the beat in 4 ( $x$ ) notes (16ths) and accent each fifth ( $y$ ) 16th note. Note that in the examples below the time signature always is the same as the number  $Y$  which gives us the number of "main" beats. This is just for convenience in order to present the polyrhythmic figures as simple and as accessible as possible. In fact the time signature is not related to the polyrhythm directly - we can have any polyrhythm over any time signature. For example -  $5:7$  in  $3/4$ ,  $3:4$  in  $5/16$ , etc.

The image displays 14 examples of polyrhythms, each on a drum set (Dr.). Each example is numbered in a box and includes a ratio  $x:y$  and a suggested order of groups of 2s and 3s (or 5s and 7s) for execution. The time signature for each example is  $y/4$ , where  $y$  is the denominator of the ratio.

- Example 1:** Ratio  $3:2$ . Time signature  $2/4$ . Suggested order:  $3:4$ .
- Example 2:** Ratio  $2:3$ . Time signature  $3/4$ . Suggested order:  $3$ .
- Example 3:** Ratio  $3:4$ . Time signature  $4/4$ . Suggested order:  $3$ .
- Example 4:** Ratio  $4:3$ . Time signature  $3/4$ . Suggested order:  $4:3$ .
- Example 5:** Ratio  $3:5$ . Time signature  $5/4$ . Suggested order:  $3:5$ .
- Example 6:** Ratio  $5:3$ . Time signature  $3/4$ . Suggested order:  $5:3$  and  $(3,2; \text{both or } 5; 2,3)$ .
- Example 7:** Ratio  $4:5$ . Time signature  $5/4$ . Suggested order:  $4:5$ .
- Example 8:** Ratio  $5:4$ . Time signature  $4/4$ . Suggested order:  $(3,2; 3,2; 2,3; 2,3)$ .
- Example 9:** Ratio  $3:7$ . Time signature  $7/4$ . Suggested order:  $3$ .
- Example 10:** Ratio  $7:3$ . Time signature  $3/4$ . Suggested order:  $(3,4; 2,3,2; 4,3)$ .
- Example 11:** Ratio  $4:7$ . Time signature  $7/4$ . Suggested order:  $4:7$ .
- Example 12:** Ratio  $7:4$ . Time signature  $4/4$ . Suggested order:  $(4,3; 2,3,2; 2,2,3; 3,4)$ .
- Example 13:** Ratio  $5:7$ . Time signature  $7/4$ . Suggested order:  $(2,3; 2,3,2,3; 2,3; 2,3; 3,2; 3,2)$ .
- Example 14:** Ratio  $7:5$ . Time signature  $5/4$ . Suggested order:  $(3,2,2; 3,2,2; 4,3; 4,3; 2,2,3)$ .

*Groups of 5 and 7 are usually easier to think of as combinations of 2s and 3s. Depending on the desired sound, certain combinations are easier. On top of each line whenever we have quintuplets or septuplets will be written a suggested order of the groups of 2s and 3s which will make the pattern easier to execute and hear. Sometimes thinking of the 5 as one group might also be helpful.*