

Rhythmic Groupings

Combinations equaling 1 bar of straight 3/4 = 6 eighth notes (can also be used for 1 bars of 6/8)

2, 4
3, 3
2, 2, 2

Combinations equaling 1 bar of straight 4/4 = 8 eighth notes

2, 6
3, 5
4, 4
2, 2, 4
2, 3, 3
2, 2, 2, 2

Combinations equaling 1 bar of triplets in 4/4 = 12 eighth notes (can also be used for 2 bars of 3/4, 2 bars of 6/8, or 1 bar of 12/8)

5, 7	3, 4, 5	3, 3, 3, 3
6, 6	4, 4, 4	2, 2, 2, 2, 4
2, 3, 7	2, 2, 2, 6	2, 2, 2, 3, 3
2, 4, 6	2, 2, 3, 5	2, 2, 2, 2, 2, 2
2, 5, 5	2, 2, 4, 4	
3, 3, 6	2, 3, 3, 4	

Combinations equaling 2 bars of straight 4/4 = 16 eighth notes

2, 7, 7	3, 3, 4, 6	3, 3, 3, 3, 4
3, 6, 7	3, 3, 5, 5	
4, 5, 7	3, 4, 4, 5	2, 2, 2, 2, 2, 6
4, 6, 6	4, 4, 4, 4	2, 2, 2, 2, 3, 5
5, 5, 6	2, 2, 2, 3, 7	2, 2, 2, 2, 4, 4
2, 2, 5, 7	2, 2, 2, 4, 6	2, 2, 2, 3, 3, 4
2, 2, 6, 6	2, 2, 2, 5, 5	2, 2, 3, 3, 3, 3
2, 3, 4, 7	2, 2, 3, 3, 6	2, 2, 2, 2, 2, 2, 4
2, 3, 5, 6	2, 2, 3, 4, 5	2, 2, 2, 2, 2, 3, 3
2, 4, 4, 6	2, 2, 4, 4, 4	
2, 4, 5, 5	2, 3, 3, 3, 5	2, 2, 2, 2, 2, 2, 2, 2
3, 3, 3, 7	2, 3, 3, 4, 4	

Combinations equaling 2 bars of triplets in 4/4 = 24 eighth-note triplets (can also be used for 4 bars of 3/4, 4 bars of 6/8, or 2 bars of 12/8)

3, 7, 7, 7	2, 3, 4, 4, 4, 7	
4, 6, 7, 7	2, 3, 4, 4, 5, 6	2, 2, 2, 2, 2, 2, 5, 7
5, 5, 7, 7	2, 3, 4, 5, 5, 5	2, 2, 2, 2, 2, 2, 6, 6
5, 6, 6, 7	2, 4, 4, 4, 4, 6	2, 2, 2, 2, 2, 3, 4, 7
6, 6, 6, 6	2, 4, 4, 4, 5, 5	2, 2, 2, 2, 2, 3, 5, 6
	3, 3, 3, 3, 5, 7	2, 2, 2, 2, 2, 4, 4, 6
2, 2, 6, 7, 7	3, 3, 3, 3, 6, 6	2, 2, 2, 2, 2, 4, 5, 5
2, 3, 5, 7, 7	3, 3, 3, 4, 4, 7	2, 2, 2, 2, 3, 3, 3, 7
2, 3, 6, 6, 7	3, 3, 3, 4, 5, 6	2, 2, 2, 2, 3, 3, 4, 6
2, 4, 4, 7, 7	3, 3, 3, 5, 5, 5	2, 2, 2, 2, 3, 3, 5, 5
2, 4, 5, 6, 7	3, 3, 4, 4, 4, 6	2, 2, 2, 2, 3, 4, 4, 5
2, 4, 6, 6, 6	3, 3, 4, 4, 5, 5	2, 2, 2, 2, 4, 4, 4, 4
2, 5, 5, 5, 7	3, 4, 4, 4, 4, 5	2, 2, 2, 3, 3, 3, 3, 6
2, 5, 5, 6, 6	4, 4, 4, 4, 4, 4	2, 2, 2, 3, 3, 3, 4, 5
3, 3, 4, 7, 7		2, 2, 2, 3, 3, 4, 4, 4
3, 3, 5, 6, 7	2, 2, 2, 2, 2, 7, 7	2, 2, 3, 3, 3, 3, 3, 5
3, 3, 6, 6, 6	2, 2, 2, 2, 3, 6, 7	2, 2, 3, 3, 3, 3, 4, 4
3, 4, 4, 6, 7	2, 2, 2, 2, 4, 5, 7	2, 3, 3, 3, 3, 3, 3, 4
3, 4, 5, 5, 7	2, 2, 2, 2, 4, 6, 6	3, 3, 3, 3, 3, 3, 3, 3
3, 4, 5, 6, 6	2, 2, 2, 2, 5, 5, 6	
3, 5, 5, 5, 6	2, 2, 2, 3, 3, 5, 7	2, 2, 2, 2, 2, 2, 3, 7
4, 4, 4, 5, 7	2, 2, 2, 3, 3, 6, 6	2, 2, 2, 2, 2, 2, 4, 6
4, 4, 4, 6, 6	2, 2, 2, 3, 4, 4, 7	2, 2, 2, 2, 2, 2, 5, 5
4, 4, 5, 5, 6	2, 2, 2, 3, 4, 5, 6	2, 2, 2, 2, 2, 2, 3, 3, 6
4, 5, 5, 5, 5	2, 2, 2, 3, 5, 5, 5	2, 2, 2, 2, 2, 2, 3, 4, 5
	2, 2, 2, 4, 4, 4, 6	2, 2, 2, 2, 2, 2, 4, 4, 4
2, 2, 2, 4, 7, 7	2, 2, 2, 4, 4, 5, 5	2, 2, 2, 2, 2, 3, 3, 3, 5
2, 2, 2, 5, 6, 7	2, 2, 3, 3, 3, 4, 7	2, 2, 2, 2, 2, 3, 3, 4, 4
2, 2, 2, 6, 6, 6	2, 2, 3, 3, 3, 5, 6	2, 2, 2, 2, 3, 3, 3, 3, 4
2, 2, 3, 3, 7, 7	2, 2, 3, 3, 4, 4, 6	2, 2, 2, 3, 3, 3, 3, 3, 3
2, 2, 3, 4, 6, 7	2, 2, 3, 3, 4, 5, 5	
2, 2, 3, 5, 5, 7	2, 2, 3, 4, 4, 4, 5	2, 2, 2, 2, 2, 2, 2, 2, 6
2, 2, 3, 5, 6, 6	2, 2, 4, 4, 4, 4, 4	2, 2, 2, 2, 2, 2, 2, 3, 5
2, 2, 4, 4, 5, 7	2, 3, 3, 3, 3, 3, 7	2, 2, 2, 2, 2, 2, 2, 4, 4
2, 2, 4, 4, 6, 6	2, 3, 3, 3, 3, 4, 6	2, 2, 2, 2, 2, 2, 3, 3, 4
2, 2, 4, 5, 5, 6	2, 3, 3, 3, 3, 5, 5	2, 2, 2, 2, 2, 2, 3, 3, 3
2, 2, 5, 5, 5, 5	2, 3, 3, 3, 4, 4, 5	
2, 3, 3, 3, 6, 7	2, 3, 3, 4, 4, 4, 4	2, 2, 2, 2, 2, 2, 2, 2, 2, 4
2, 3, 3, 4, 5, 7	3, 3, 3, 3, 3, 3, 6	2, 2, 2, 2, 2, 2, 2, 2, 3, 3
2, 3, 3, 4, 6, 6	3, 3, 3, 3, 3, 4, 5	2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2
2, 3, 3, 5, 5, 6	3, 3, 3, 3, 4, 4, 4	

Combinations equaling 4 bars of straight 4/4 = 32 eighth-note triplets

4, 7, 7, 7, 7	2, 4, 4, 4, 4, 7, 7
5, 6, 7, 7, 7	2, 4, 4, 4, 5, 6, 7
6, 6, 6, 7, 7	2, 4, 4, 4, 6, 6, 6
	2, 4, 4, 5, 5, 5, 7
2, 2, 7, 7, 7, 7	2, 4, 4, 5, 5, 6, 6
2, 3, 6, 7, 7, 7	2, 4, 5, 5, 5, 5, 6
2, 4, 5, 7, 7, 7	2, 5, 5, 5, 5, 5, 5
2, 4, 6, 6, 7, 7	3, 3, 3, 3, 6, 7, 7
2, 5, 5, 6, 7, 7	3, 3, 3, 4, 5, 7, 7
2, 5, 6, 6, 6, 7	3, 3, 3, 4, 6, 6, 7
2, 6, 6, 6, 6, 6	3, 3, 3, 5, 5, 6, 7
3, 3, 5, 7, 7, 7	3, 3, 3, 5, 6, 6, 6
3, 3, 6, 6, 7, 7	3, 3, 4, 4, 4, 7, 7
3, 4, 4, 7, 7, 7	3, 3, 4, 4, 5, 6, 7
3, 4, 5, 6, 7, 7	3, 3, 4, 4, 6, 6, 6
3, 4, 6, 6, 6, 7	3, 3, 4, 5, 5, 5, 7
3, 5, 5, 5, 7, 7	3, 3, 4, 5, 5, 6, 6
3, 5, 5, 6, 6, 7	3, 3, 5, 5, 5, 5, 6
3, 5, 6, 6, 6, 6	3, 4, 4, 4, 4, 6, 7
4, 4, 4, 6, 7, 7	3, 4, 4, 4, 5, 5, 7
4, 4, 5, 5, 7, 7	3, 4, 4, 4, 5, 6, 6
4, 4, 5, 6, 6, 7	3, 4, 4, 5, 5, 5, 6
4, 4, 6, 6, 6, 6	3, 4, 5, 5, 5, 5, 5
4, 5, 5, 5, 6, 7	4, 4, 4, 4, 4, 5, 7
4, 5, 5, 6, 6, 6	4, 4, 4, 4, 4, 6, 6
5, 5, 5, 5, 5, 7	4, 4, 4, 4, 5, 5, 6
5, 5, 5, 5, 6, 6	4, 4, 4, 5, 5, 5, 5
2, 2, 2, 5, 7, 7, 7	2, 2, 2, 2, 3, 7, 7, 7
2, 2, 2, 6, 6, 7, 7	2, 2, 2, 2, 4, 6, 7, 7
2, 2, 3, 4, 7, 7, 7	2, 2, 2, 2, 5, 5, 7, 7
2, 2, 3, 5, 6, 7, 7	2, 2, 2, 2, 5, 6, 6, 7
2, 2, 3, 6, 6, 6, 7	2, 2, 2, 2, 6, 6, 6, 6
2, 2, 4, 4, 6, 7, 7	2, 2, 2, 3, 3, 6, 7, 7
2, 2, 4, 5, 5, 7, 7	2, 2, 2, 3, 4, 5, 7, 7
2, 2, 4, 5, 6, 6, 7	2, 2, 2, 3, 4, 6, 6, 7
2, 2, 4, 6, 6, 6, 6	2, 2, 2, 3, 5, 5, 6, 7
2, 2, 5, 5, 5, 6, 7	2, 2, 2, 3, 5, 6, 6, 6
2, 2, 5, 5, 6, 6, 6	2, 2, 2, 4, 4, 4, 7, 7
2, 3, 3, 3, 7, 7, 7	2, 2, 2, 4, 4, 5, 6, 7
2, 3, 3, 4, 6, 7, 7	2, 2, 2, 4, 4, 6, 6, 6
2, 3, 3, 5, 5, 7, 7	2, 2, 2, 4, 5, 5, 5, 7
2, 3, 3, 5, 6, 6, 7	2, 2, 2, 4, 5, 5, 6, 6
2, 3, 3, 6, 6, 6, 6	2, 2, 2, 5, 5, 5, 5, 6
2, 3, 4, 4, 5, 7, 7	2, 2, 3, 3, 3, 5, 7, 7
2, 3, 4, 4, 6, 6, 7	2, 2, 3, 3, 3, 6, 6, 7
2, 3, 4, 5, 5, 6, 7	2, 2, 3, 3, 4, 4, 7, 7
2, 3, 4, 5, 6, 6, 6	2, 2, 3, 3, 4, 5, 6, 7
2, 3, 5, 5, 5, 5, 7	2, 2, 3, 3, 4, 6, 6, 6
2, 3, 5, 5, 5, 6, 6	2, 2, 3, 3, 5, 5, 5, 7

2, 2, 3, 3, 5, 5, 6, 6	2, 2, 2, 2, 3, 3, 6, 6, 6
2, 2, 3, 4, 4, 4, 6, 7	2, 2, 2, 2, 3, 4, 4, 6, 7
2, 2, 3, 4, 4, 5, 5, 7	2, 2, 2, 2, 3, 4, 5, 5, 7
2, 2, 3, 4, 4, 5, 6, 6	2, 2, 2, 2, 3, 4, 5, 6, 6
2, 2, 3, 4, 5, 5, 5, 6	2, 2, 2, 2, 3, 5, 5, 5, 6
2, 2, 3, 5, 5, 5, 5, 5	2, 2, 2, 2, 4, 4, 4, 5, 7
2, 2, 4, 4, 4, 4, 5, 7	2, 2, 2, 2, 4, 4, 4, 6, 6
2, 2, 4, 4, 4, 4, 6, 6	2, 2, 2, 2, 4, 4, 5, 5, 6
2, 2, 4, 4, 4, 5, 5, 6	2, 2, 2, 2, 4, 5, 5, 5, 5
2, 2, 4, 4, 5, 5, 5, 5	2, 2, 2, 3, 3, 3, 3, 7, 7
2, 3, 3, 3, 3, 4, 7, 7	2, 2, 2, 3, 3, 3, 4, 6, 7
2, 3, 3, 3, 3, 5, 6, 7	2, 2, 2, 3, 3, 3, 5, 5, 7
2, 3, 3, 3, 3, 6, 6, 6	2, 2, 2, 3, 3, 3, 5, 6, 6
2, 3, 3, 3, 4, 4, 6, 7	2, 2, 2, 3, 3, 4, 4, 5, 7
2, 3, 3, 3, 4, 5, 5, 7	2, 2, 2, 3, 3, 4, 4, 6, 6
2, 3, 3, 3, 4, 5, 6, 6	2, 2, 2, 3, 3, 4, 5, 5, 6
2, 3, 3, 3, 5, 5, 5, 6	2, 2, 2, 3, 3, 5, 5, 5, 5
2, 3, 3, 4, 4, 4, 5, 7	2, 2, 2, 3, 4, 4, 4, 4, 7
2, 3, 3, 4, 4, 4, 6, 6	2, 2, 2, 3, 4, 4, 4, 5, 6
2, 3, 3, 4, 4, 5, 5, 6	2, 2, 2, 3, 4, 4, 5, 5, 5
2, 3, 3, 4, 5, 5, 5, 5	2, 2, 2, 4, 4, 4, 4, 4, 6
2, 3, 4, 4, 4, 4, 4, 7	2, 2, 2, 4, 4, 4, 4, 5, 5
2, 3, 4, 4, 4, 4, 5, 6	2, 2, 3, 3, 3, 3, 3, 6, 7
2, 3, 4, 4, 4, 5, 5, 5	2, 2, 3, 3, 3, 3, 4, 5, 7
2, 4, 4, 4, 4, 4, 4, 6	2, 2, 3, 3, 3, 3, 4, 6, 6
2, 4, 4, 4, 4, 4, 5, 5	2, 2, 3, 3, 3, 3, 5, 5, 6
3, 3, 3, 3, 3, 3, 7, 7	2, 2, 3, 3, 3, 4, 4, 4, 7
3, 3, 3, 3, 3, 4, 6, 7	2, 2, 3, 3, 3, 4, 4, 5, 6
3, 3, 3, 3, 3, 5, 5, 7	2, 2, 3, 3, 3, 4, 5, 5, 5
3, 3, 3, 3, 3, 5, 6, 6	2, 2, 3, 3, 4, 4, 4, 4, 6
3, 3, 3, 3, 4, 4, 5, 7	2, 2, 3, 3, 4, 4, 4, 5, 5
3, 3, 3, 3, 4, 4, 6, 6	2, 2, 3, 4, 4, 4, 4, 4, 5
3, 3, 3, 3, 4, 5, 5, 6	2, 2, 4, 4, 4, 4, 4, 4, 4
3, 3, 3, 3, 5, 5, 5, 5	2, 3, 3, 3, 3, 3, 3, 5, 7
3, 3, 3, 4, 4, 4, 4, 7	2, 3, 3, 3, 3, 3, 3, 6, 6
3, 3, 3, 4, 4, 4, 5, 6	2, 3, 3, 3, 3, 3, 4, 4, 7
3, 3, 3, 4, 4, 5, 5, 5	2, 3, 3, 3, 3, 3, 4, 5, 6
3, 3, 4, 4, 4, 4, 4, 6	2, 3, 3, 3, 3, 3, 5, 5, 5
3, 3, 4, 4, 4, 4, 5, 5	2, 3, 3, 3, 3, 4, 4, 4, 6
3, 4, 4, 4, 4, 4, 4, 5	2, 3, 3, 3, 3, 4, 4, 5, 5
4, 4, 4, 4, 4, 4, 4, 4	2, 3, 3, 3, 3, 4, 4, 4, 5
	2, 3, 3, 4, 4, 4, 4, 4, 4
2, 2, 2, 2, 2, 2, 6, 7, 7	3, 3, 3, 3, 3, 3, 3, 4, 7
2, 2, 2, 2, 2, 3, 5, 7, 7	3, 3, 3, 3, 3, 3, 3, 5, 6
2, 2, 2, 2, 2, 3, 6, 6, 7	3, 3, 3, 3, 3, 3, 4, 4, 6
2, 2, 2, 2, 2, 4, 4, 7, 7	3, 3, 3, 3, 3, 3, 4, 5, 5
2, 2, 2, 2, 2, 4, 5, 6, 7	3, 3, 3, 3, 3, 4, 4, 4, 5
2, 2, 2, 2, 2, 4, 6, 6, 6	3, 3, 3, 3, 4, 4, 4, 4, 4
2, 2, 2, 2, 2, 5, 5, 5, 7	
2, 2, 2, 2, 2, 5, 5, 6, 6	2, 2, 2, 2, 2, 2, 4, 7, 7
2, 2, 2, 2, 3, 3, 4, 7, 7	2, 2, 2, 2, 2, 2, 5, 6, 7
2, 2, 2, 2, 3, 3, 5, 6, 7	2, 2, 2, 2, 2, 2, 6, 6, 6

2, 2, 2, 2, 2, 2, 3, 3, 7, 7
2, 2, 2, 2, 2, 2, 3, 4, 6, 7
2, 2, 2, 2, 2, 2, 3, 5, 5, 7
2, 2, 2, 2, 2, 2, 3, 5, 6, 6
2, 2, 2, 2, 2, 2, 4, 4, 5, 7
2, 2, 2, 2, 2, 2, 4, 4, 6, 6
2, 2, 2, 2, 2, 2, 4, 5, 5, 6
2, 2, 2, 2, 2, 2, 5, 5, 5, 5
2, 2, 2, 2, 2, 3, 3, 3, 6, 7
2, 2, 2, 2, 2, 3, 3, 4, 5, 7
2, 2, 2, 2, 2, 3, 3, 4, 6, 6
2, 2, 2, 2, 2, 3, 3, 5, 5, 6
2, 2, 2, 2, 2, 3, 4, 4, 4, 7
2, 2, 2, 2, 2, 3, 4, 4, 5, 6
2, 2, 2, 2, 2, 3, 4, 5, 5, 5
2, 2, 2, 2, 2, 4, 4, 4, 4, 6
2, 2, 2, 2, 2, 4, 4, 4, 5, 5
2, 2, 2, 2, 3, 3, 3, 3, 5, 7
2, 2, 2, 2, 3, 3, 3, 3, 6, 6
2, 2, 2, 2, 3, 3, 3, 4, 4, 7
2, 2, 2, 2, 3, 3, 3, 4, 5, 6
2, 2, 2, 2, 3, 3, 3, 5, 5, 5
2, 2, 2, 2, 3, 3, 4, 4, 4, 6
2, 2, 2, 2, 3, 3, 4, 4, 5, 5
2, 2, 2, 2, 3, 3, 3, 3, 3, 4, 7
2, 2, 2, 3, 3, 3, 3, 3, 3, 5, 6
2, 2, 2, 2, 3, 3, 3, 3, 4, 6
2, 2, 2, 2, 3, 3, 3, 4, 5, 5
2, 2, 2, 2, 3, 3, 3, 4, 4, 5
2, 2, 2, 2, 3, 3, 4, 4, 4, 4
2, 2, 2, 3, 3, 3, 3, 3, 3, 7
2, 2, 3, 3, 3, 3, 3, 3, 4, 6
2, 2, 3, 3, 3, 3, 3, 3, 5, 5
2, 2, 3, 3, 3, 3, 3, 4, 4, 5
2, 2, 3, 3, 3, 3, 4, 4, 4, 4
2, 3, 3, 3, 3, 3, 3, 3, 3, 6
2, 3, 3, 3, 3, 3, 3, 3, 4, 5
3, 3, 3, 3, 3, 3, 3, 3, 3, 5
3, 3, 3, 3, 3, 3, 3, 3, 4, 4

2, 2, 2, 2, 2, 2, 2, 2, 2, 7, 7
2, 2, 2, 2, 2, 2, 2, 2, 3, 6, 7
2, 2, 2, 2, 2, 2, 2, 2, 4, 5, 7
2, 2, 2, 2, 2, 2, 2, 2, 4, 6, 6
2, 2, 2, 2, 2, 2, 2, 2, 5, 5, 6
2, 2, 2, 2, 2, 2, 2, 3, 3, 5, 7
2, 2, 2, 2, 2, 2, 2, 3, 3, 6, 6
2, 2, 2, 2, 2, 2, 2, 3, 4, 4, 7
2, 2, 2, 2, 2, 2, 3, 4, 5, 6

Combinations equaling 4 bars of triplet 4/4 = 48 eighth-note triplets (can also be used for 8 bars of 3/4, 8 bars of 6/8, or 4 bars of 12/8)

2, 2, 2, 2, 2, 2, 2, 3, 3, 4, 6, 6, 6, 6
2, 2, 2, 2, 2, 2, 2, 3, 3, 5, 5, 5, 6, 7
2, 2, 2, 2, 2, 2, 2, 3, 3, 5, 5, 6, 6, 6
2, 2, 2, 2, 2, 2, 2, 3, 3, 7, 7, 7, 7
2, 2, 2, 2, 2, 2, 2, 3, 4, 4, 4, 4, 4, 4, 4, 7
2, 2, 2, 2, 2, 2, 2, 3, 4, 4, 4, 4, 4, 4, 5, 6
2, 2, 2, 2, 2, 2, 2, 3, 4, 4, 4, 4, 4, 5, 5, 5
2, 2, 2, 2, 2, 2, 2, 3, 4, 4, 4, 4, 5, 5, 5
2, 2, 2, 2, 2, 2, 2, 3, 4, 4, 4, 4, 5, 7, 7
2, 2, 2, 2, 2, 2, 2, 3, 4, 4, 4, 6, 6, 7
2, 2, 2, 2, 2, 2, 2, 3, 4, 4, 5, 5, 6, 7
2, 2, 2, 2, 2, 2, 2, 3, 4, 4, 5, 6, 6, 6
2, 2, 2, 2, 2, 2, 2, 3, 4, 5, 5, 5, 5, 7
2, 2, 2, 2, 2, 2, 2, 3, 4, 5, 5, 5, 6, 6
2, 2, 2, 2, 2, 2, 2, 3, 4, 6, 7, 7, 7
2, 2, 2, 2, 2, 2, 2, 3, 5, 5, 5, 5, 5, 6
2, 2, 2, 2, 2, 2, 2, 3, 5, 5, 7, 7, 7
2, 2, 2, 2, 2, 2, 2, 3, 5, 6, 6, 7, 7
2, 2, 2, 2, 2, 2, 2, 3, 6, 6, 6, 6, 7
2, 2, 2, 2, 2, 2, 2, 4, 4, 4, 4, 4, 4, 4, 6
2, 2, 2, 2, 2, 2, 2, 4, 4, 4, 4, 4, 4, 5, 5
2, 2, 2, 2, 2, 2, 2, 4, 4, 4, 4, 4, 7, 7
2, 2, 2, 2, 2, 2, 2, 4, 4, 4, 4, 5, 6, 7
2, 2, 2, 2, 2, 2, 2, 4, 4, 4, 4, 6, 6, 6
2, 2, 2, 2, 2, 2, 2, 4, 4, 5, 5, 5, 7
2, 2, 2, 2, 2, 2, 2, 4, 4, 5, 5, 6, 6
2, 2, 2, 2, 2, 2, 2, 4, 4, 5, 5, 5, 6
2, 2, 2, 2, 2, 2, 2, 4, 4, 5, 7, 7, 7
2, 2, 2, 2, 2, 2, 2, 4, 4, 6, 6, 7, 7
2, 2, 2, 2, 2, 2, 2, 4, 5, 5, 5, 5, 5
2, 2, 2, 2, 2, 2, 2, 4, 5, 5, 6, 7, 7
2, 2, 2, 2, 2, 2, 2, 4, 5, 6, 6, 7
2, 2, 2, 2, 2, 2, 2, 4, 6, 6, 6, 6, 6
2, 2, 2, 2, 2, 2, 2, 4, 6, 7, 7, 7
2, 2, 2, 2, 2, 2, 2, 4, 5, 5, 5, 5, 5
2, 2, 2, 2, 2, 2, 2, 4, 5, 5, 6, 7
2, 2, 2, 2, 2, 2, 2, 4, 6, 6, 6, 6, 6
2, 2, 2, 2, 2, 2, 2, 4, 6, 7, 7, 7
2, 2, 2, 2, 2, 2, 2, 3, 3, 3, 3, 3, 3, 3, 3, 3
2, 2, 2, 2, 2, 2, 3, 3, 3, 3, 3, 3, 3, 3, 3, 6
2, 2, 2, 2, 2, 2, 3, 3, 3, 3, 3, 3, 3, 3, 4, 5
2, 2, 2, 2, 2, 2, 3, 3, 3, 3, 3, 3, 3, 3, 4, 4, 4
2, 2, 2, 2, 2, 2, 3, 3, 3, 3, 3, 3, 3, 5, 7
2, 2, 2, 2, 2, 2, 3, 3, 3, 3, 3, 3, 3, 5, 6, 6
2, 2, 2, 2, 2, 2, 2, 3, 3, 3, 3, 3, 3, 3, 6, 6, 6
2, 2, 2, 2, 2, 2, 2, 3, 3, 3, 3, 3, 3, 4, 4, 4, 5
2, 2, 2, 2, 2, 2, 2, 3, 3, 3, 3, 3, 3, 4, 4, 5, 5
2, 2, 2, 2, 2, 2, 2, 3, 3, 3, 3, 3, 4, 4, 4, 6, 6
2, 2, 2, 2, 2, 2, 2, 3, 3, 3, 3, 3, 4, 4, 7, 7
2, 2, 2, 2, 2, 2, 2, 3, 3, 3, 3, 3, 3, 5, 6, 7
2, 2, 2, 2, 2, 2, 2, 3, 3, 3, 3, 3, 3, 6, 6, 6
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