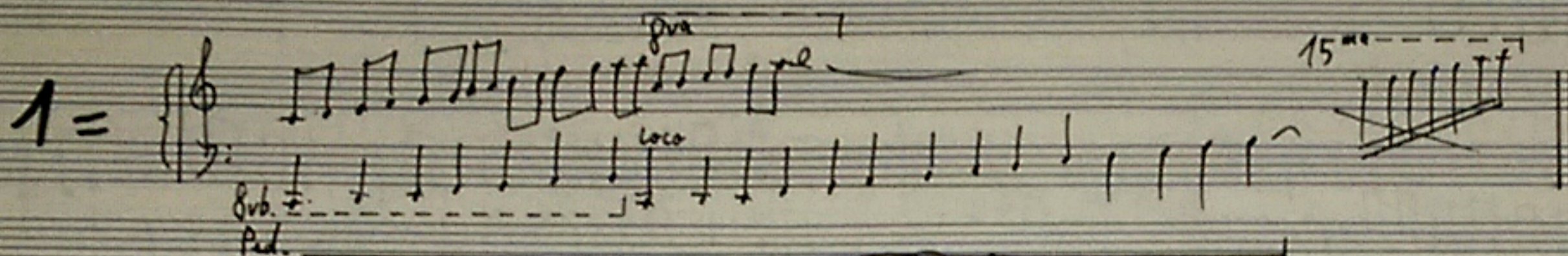


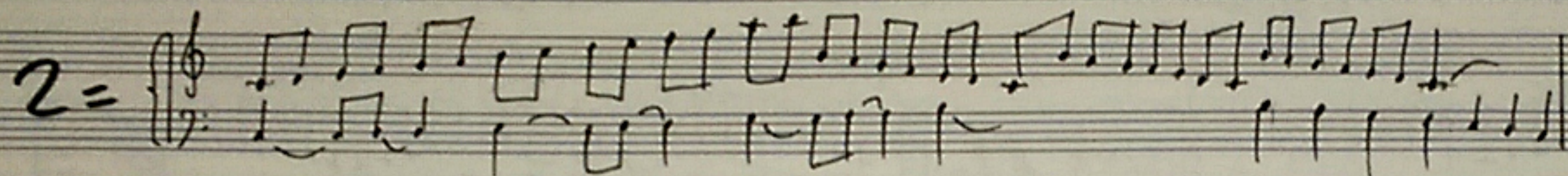
# Seven Sevens

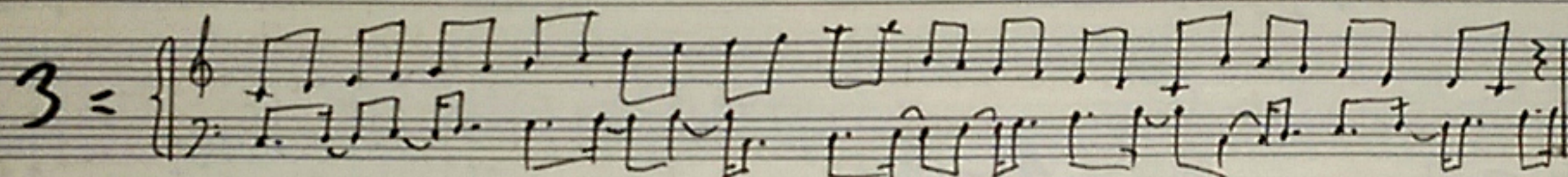
V. Villeneuve, nov. 2016

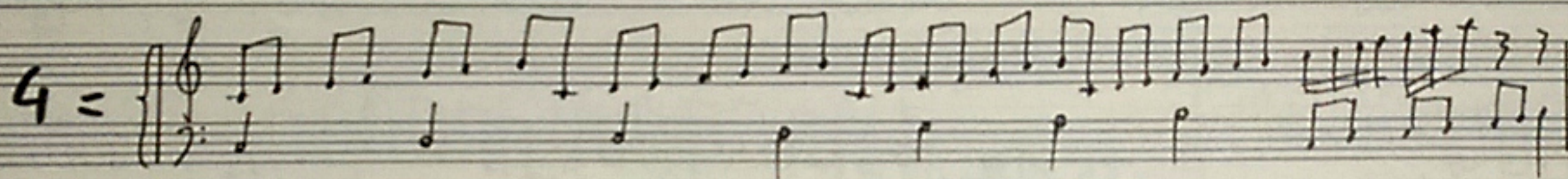
Translated from Avec sept "7", by Georges Perec.

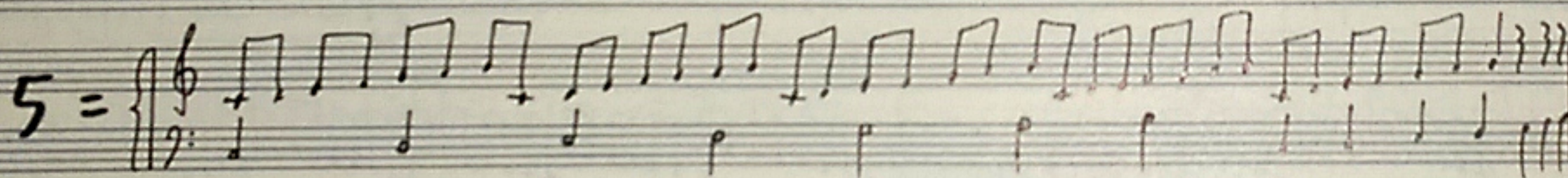
(For Tom Johnson)

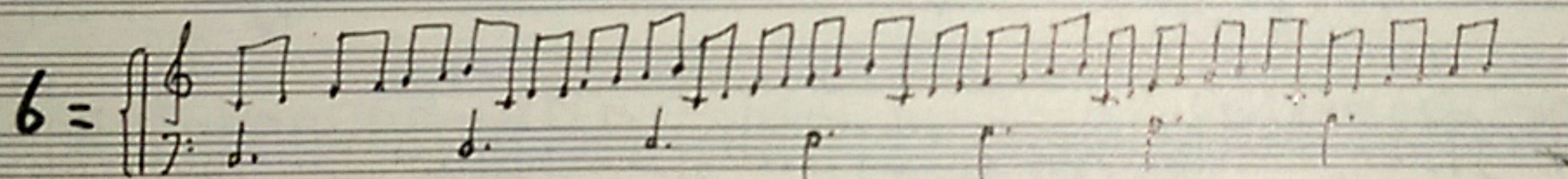
1 =   $\left( \frac{777}{777} \right)^7$

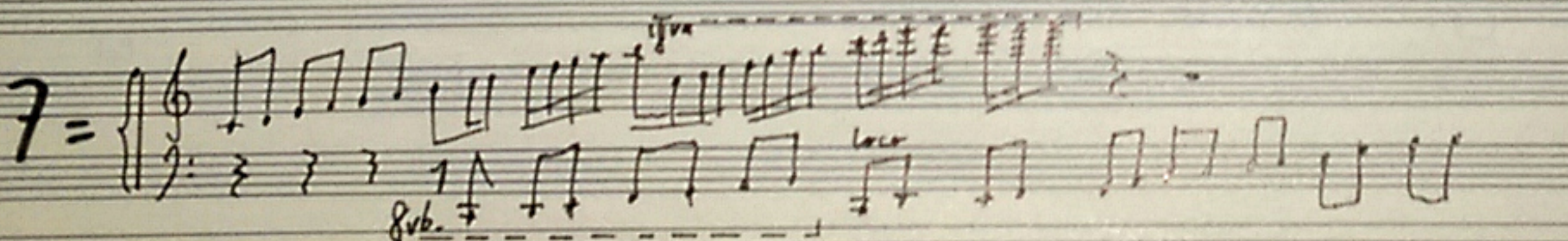
2 =   $\frac{77-7}{7} - \left( 7 + \frac{7}{7} \right)$

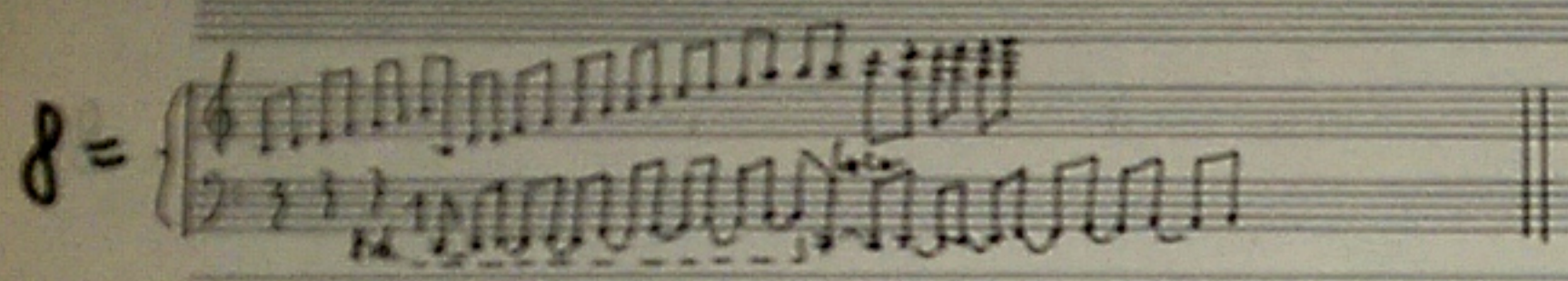
3 =   $\frac{77 - (7+7)}{7+7+7}$

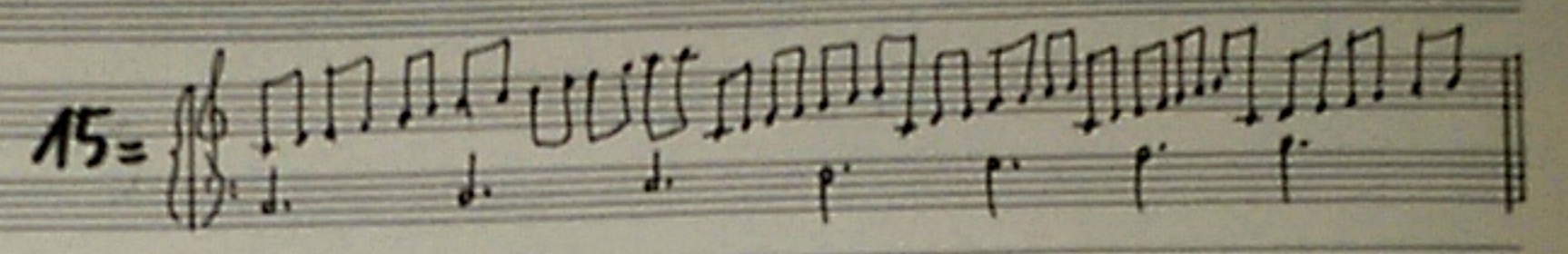
4 =   $\frac{7+7+7+7}{7} \times \frac{7}{7}$

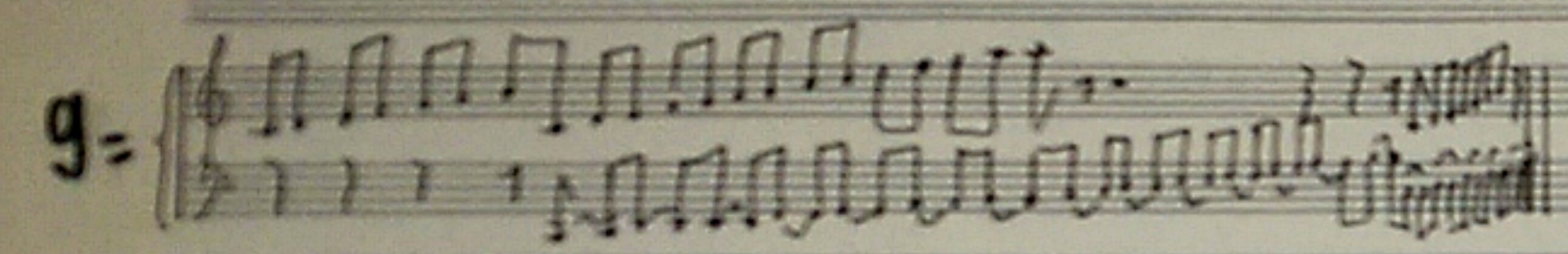
5 =   $\frac{7+7+7+7}{7} + \frac{7}{7}$

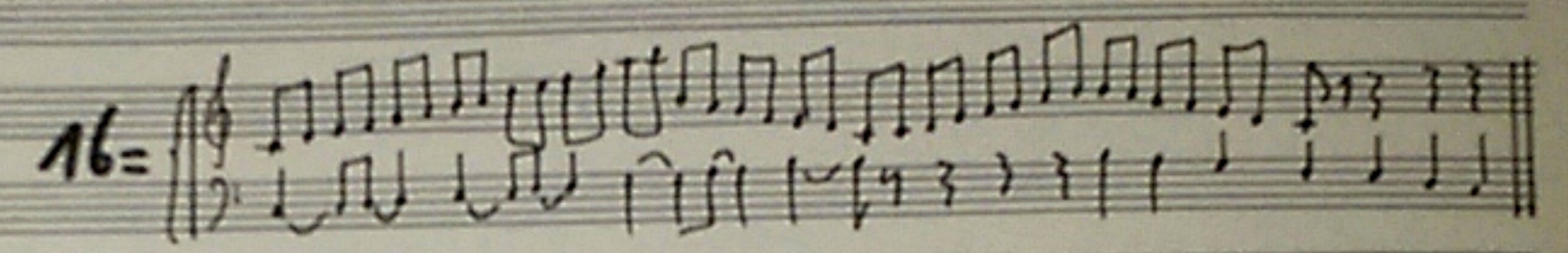
6 =   $\frac{7+7+7+7+7+7}{7}$

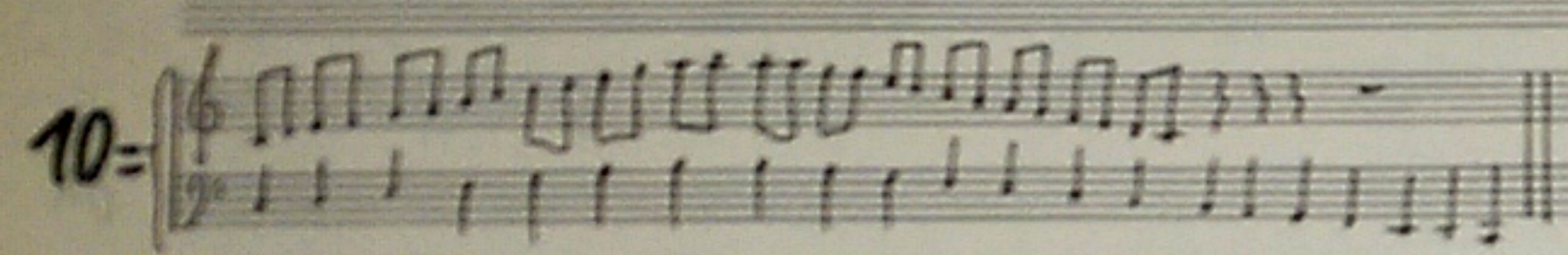
7 =   $7 \times \frac{777}{777}$

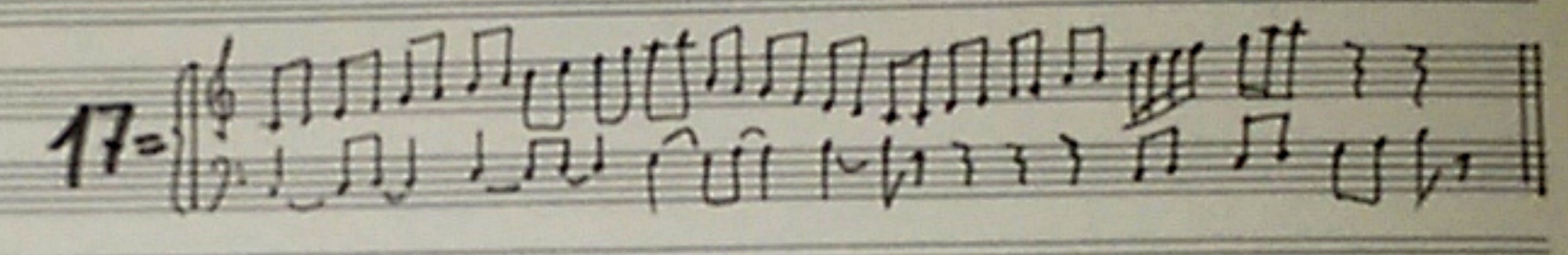
8 = 

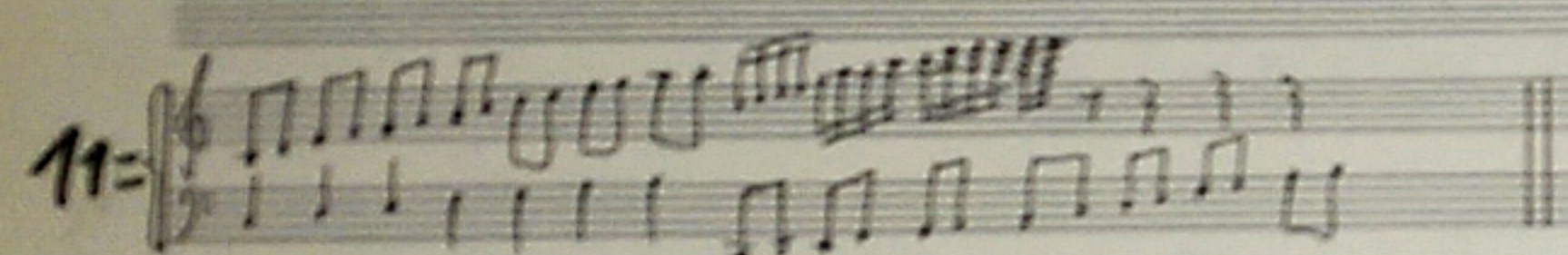
15 = 

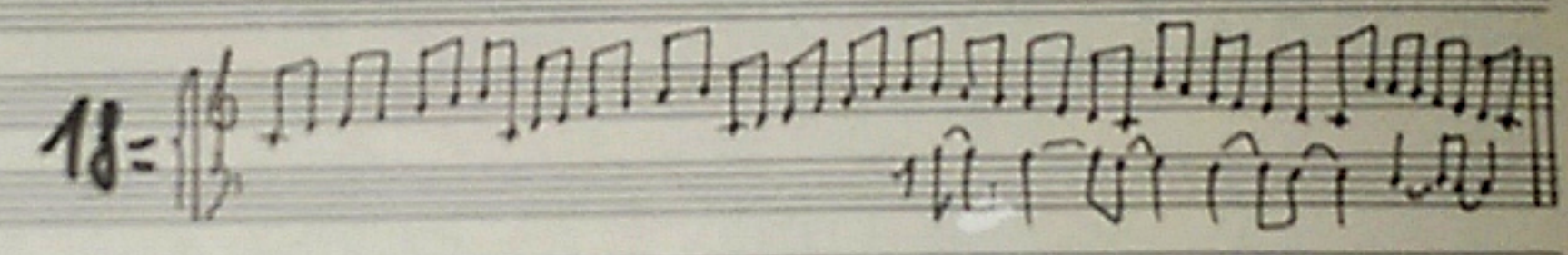
9 = 

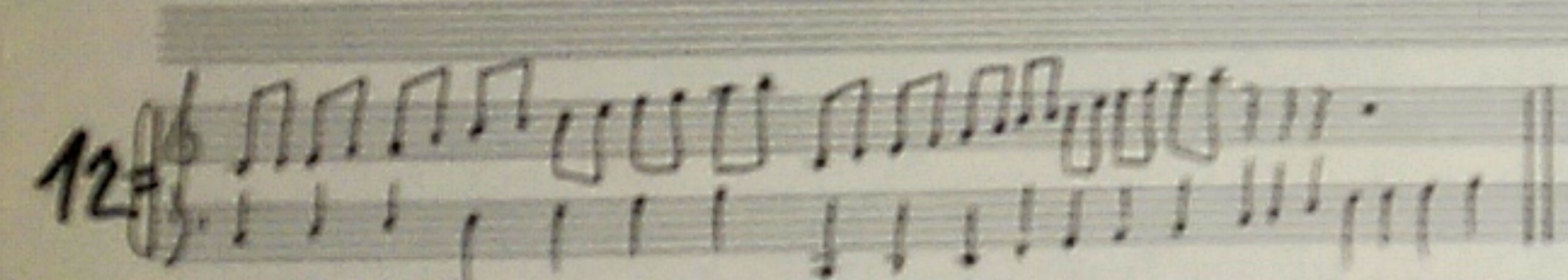
16 = 

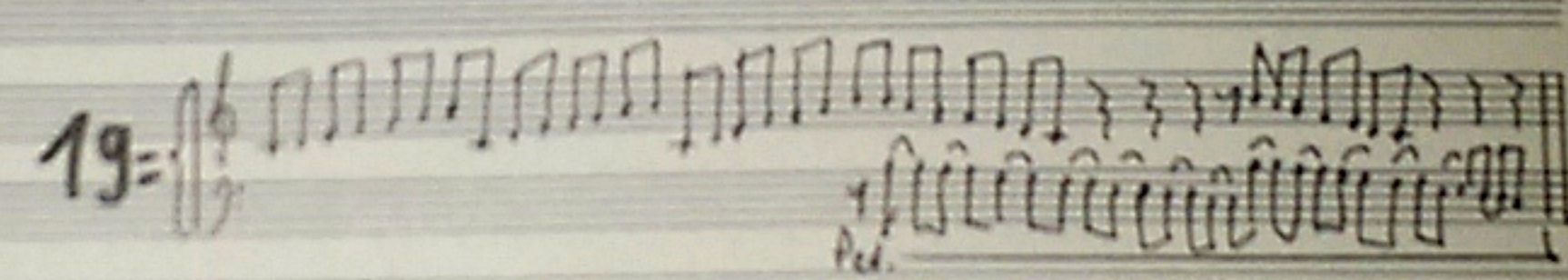
10 = 

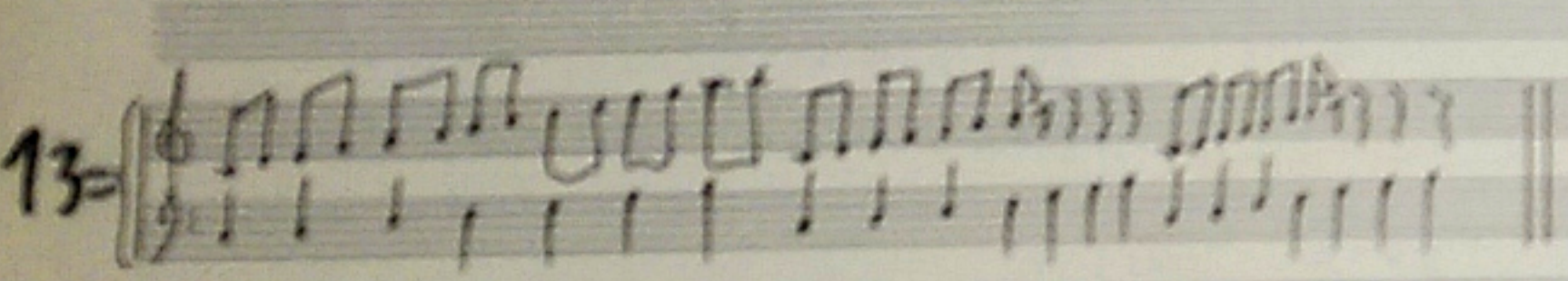
17 = 

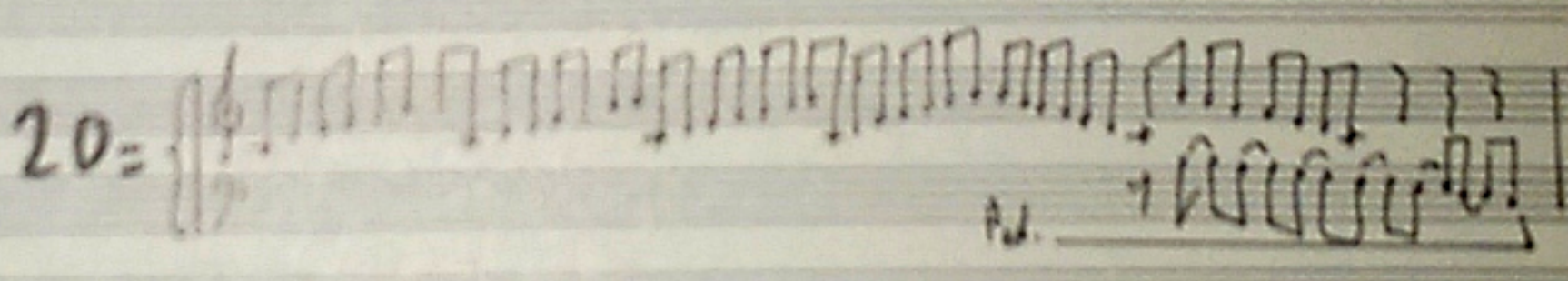
11 = 

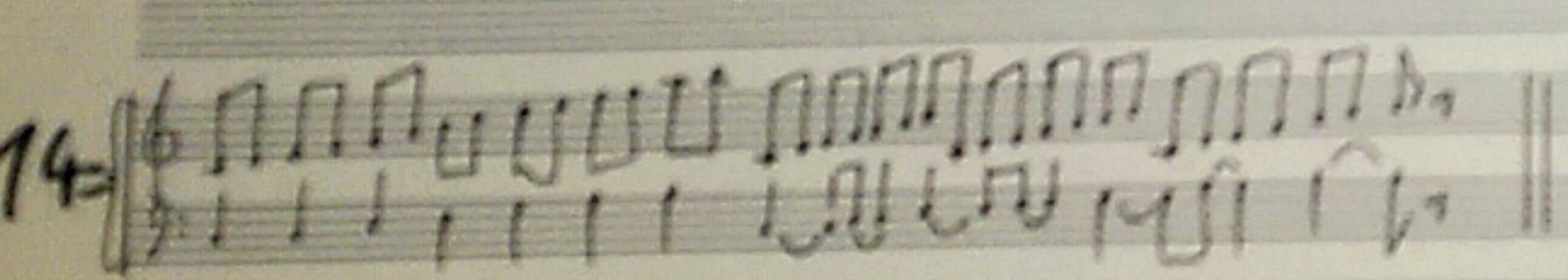
18 = 

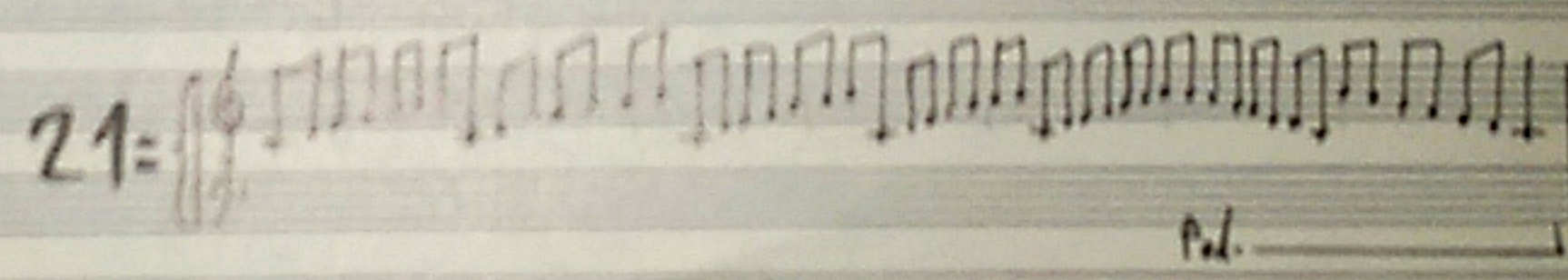
12 = 

19 = 

13 = 

20 = 

14 = 

21 = 

22=  
Handwritten musical notation for exercise 22, featuring a treble and bass staff with rhythmic patterns.

29=  
Handwritten musical notation for exercise 29, featuring a treble and bass staff with rhythmic patterns.

23=  
Handwritten musical notation for exercise 23, featuring a treble and bass staff with rhythmic patterns.

30=  
Handwritten musical notation for exercise 30, featuring a treble and bass staff with rhythmic patterns.

24=  
Handwritten musical notation for exercise 24, featuring a treble and bass staff with rhythmic patterns.

31=  
Handwritten musical notation for exercise 31, featuring a treble and bass staff with rhythmic patterns.

25=  
Handwritten musical notation for exercise 25, featuring a treble and bass staff with rhythmic patterns and a 'Ped.' marking.

32=  
Handwritten musical notation for exercise 32, featuring a treble and bass staff with rhythmic patterns and a 'Ped.' marking.

26=  
Handwritten musical notation for exercise 26, featuring a treble and bass staff with rhythmic patterns and a 'Ped.' marking.

33=  
Handwritten musical notation for exercise 33, featuring a treble and bass staff with rhythmic patterns.

27=  
Handwritten musical notation for exercise 27, featuring a treble and bass staff with rhythmic patterns.

34=  
Handwritten musical notation for exercise 34, featuring a treble and bass staff with rhythmic patterns.

28=  
Handwritten musical notation for exercise 28, featuring a treble and bass staff with rhythmic patterns.

35=  
Handwritten musical notation for exercise 35, featuring a treble and bass staff with rhythmic patterns.

36 =

37 =

38 =

39 =

40 =

41 =

42 =

43 =

44 =

45 =

46 =

47 =

48 =

49 =

50 =

51 =

52 =

53 =

54 =

55 =

56 =

57 =

58 =

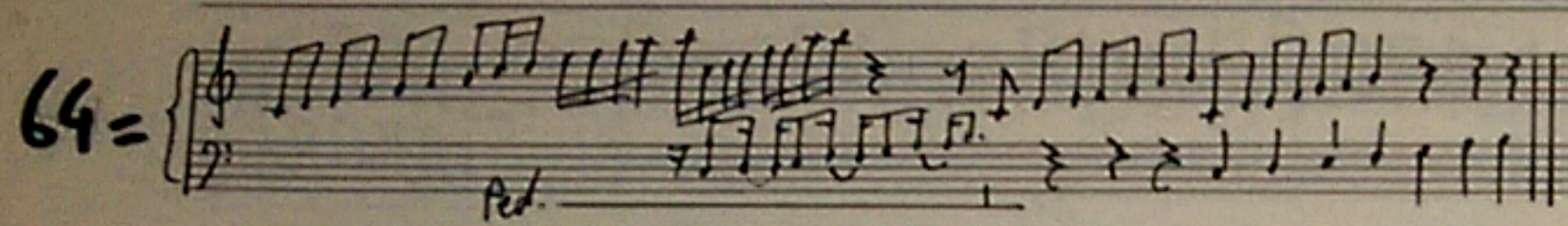
59 =

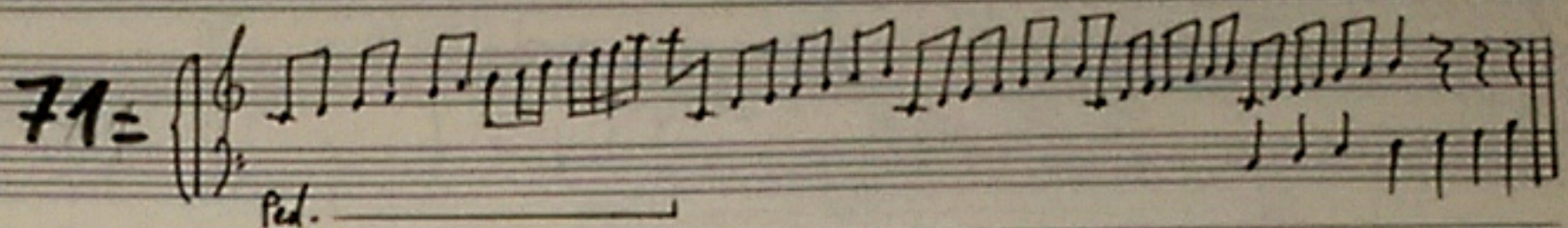
60 =

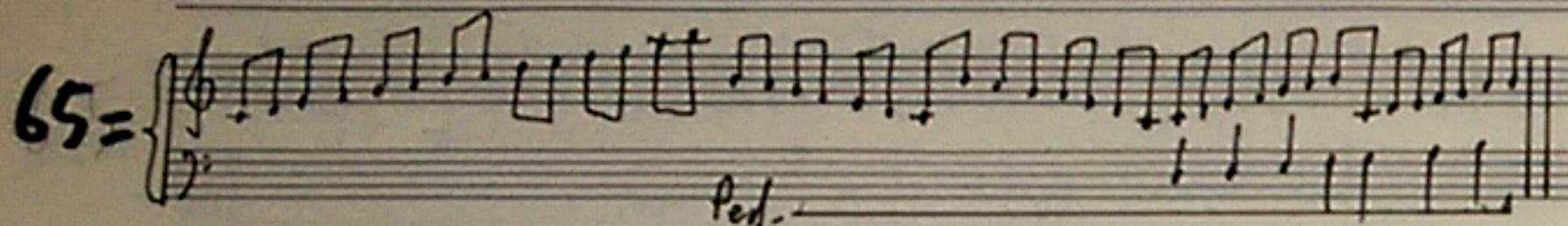
61 =

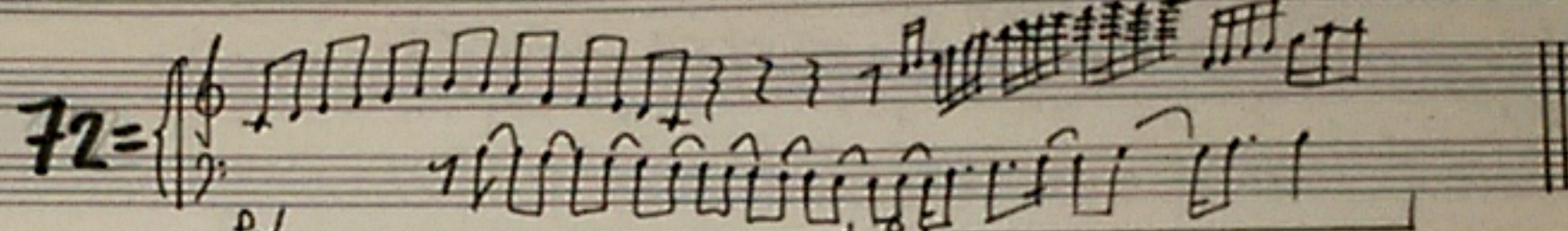
62 =

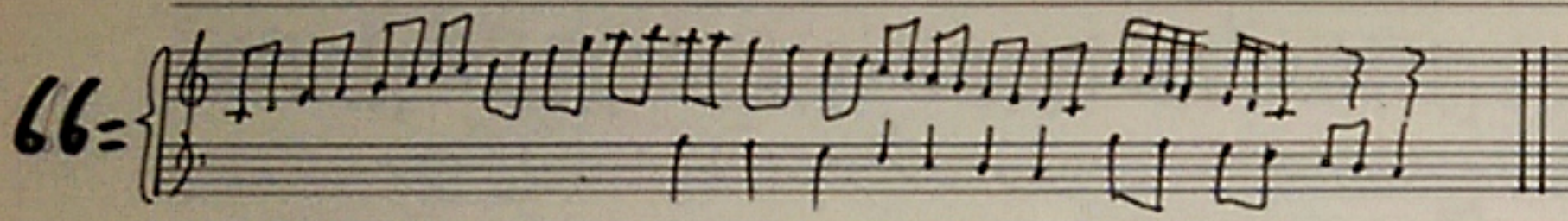
63 =

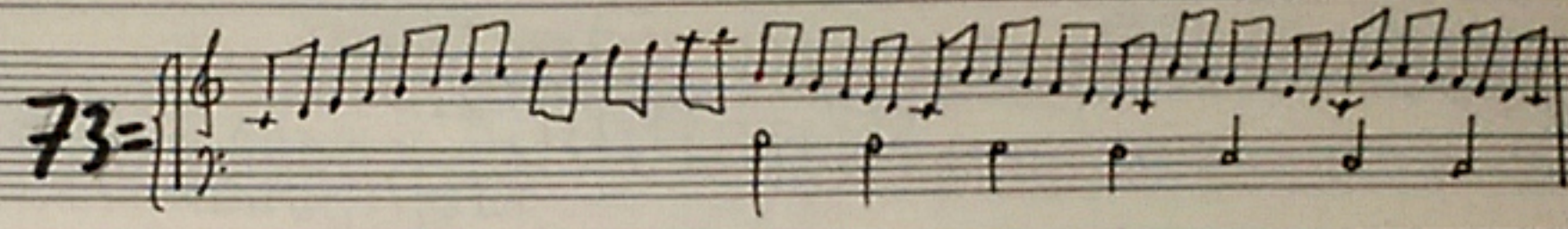
64 = 

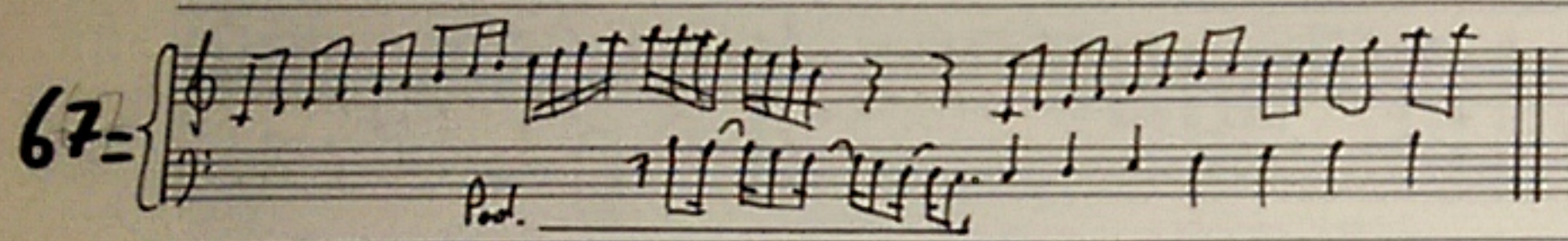
71 = 

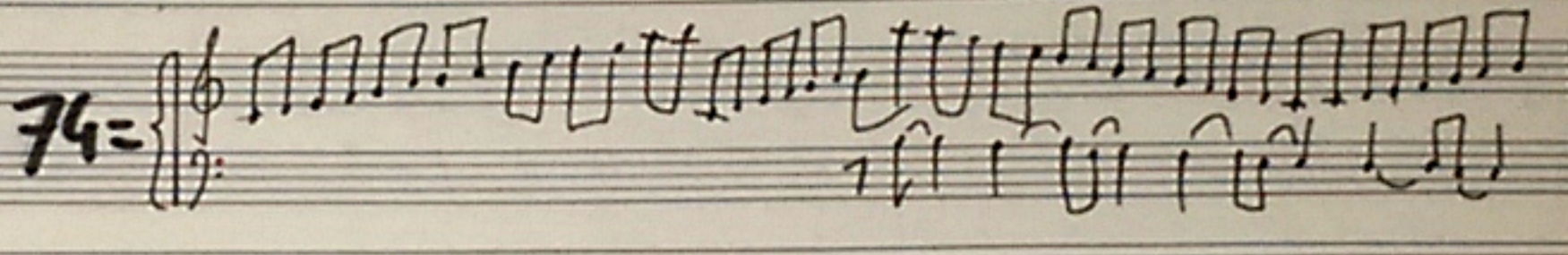
65 = 

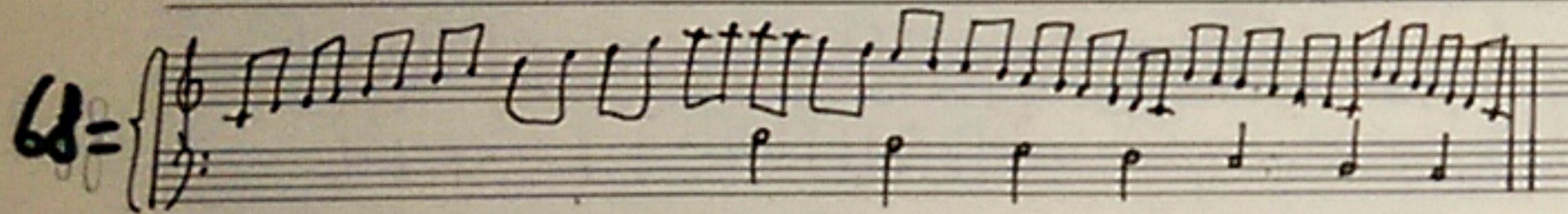
72 = 

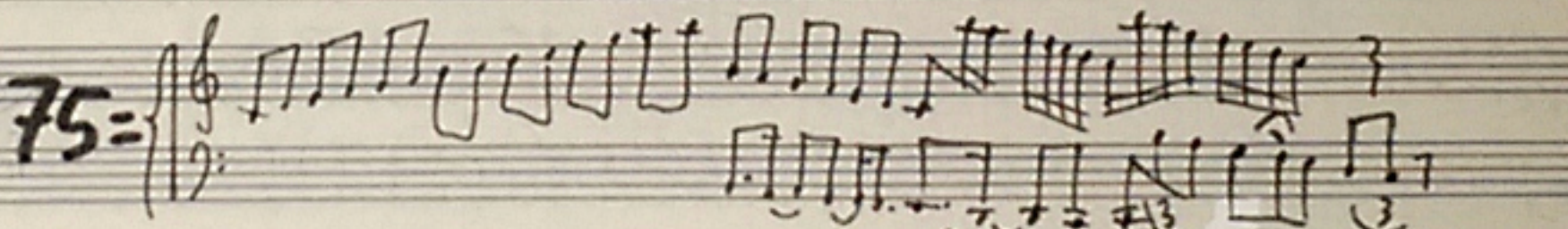
66 = 

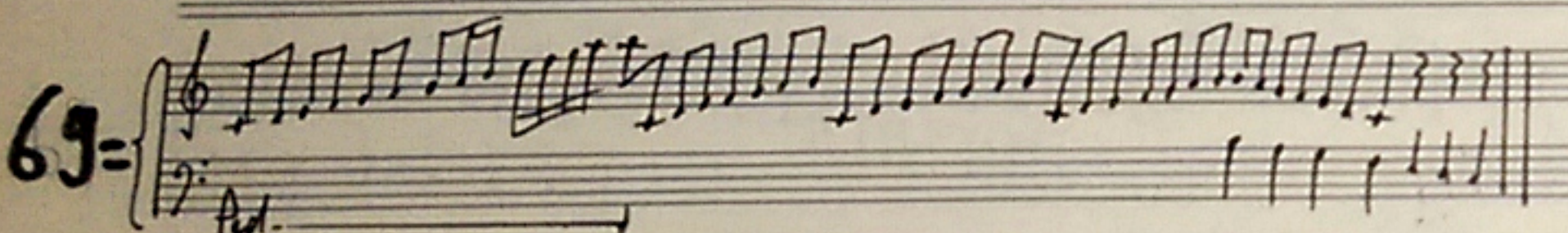
73 = 

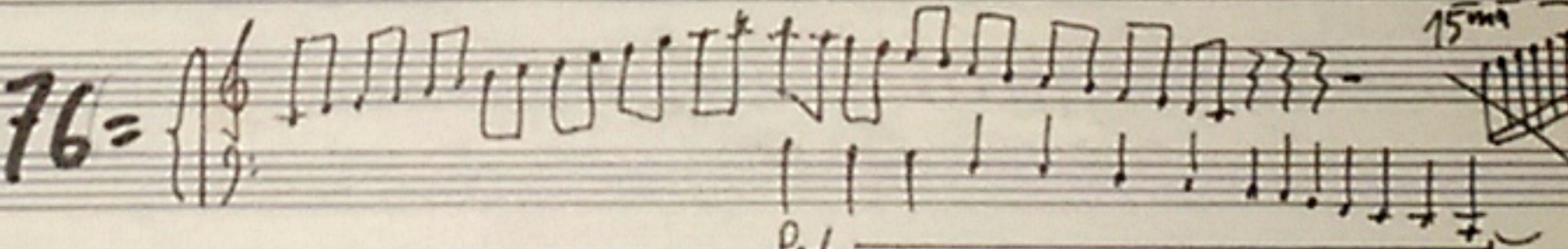
67 = 

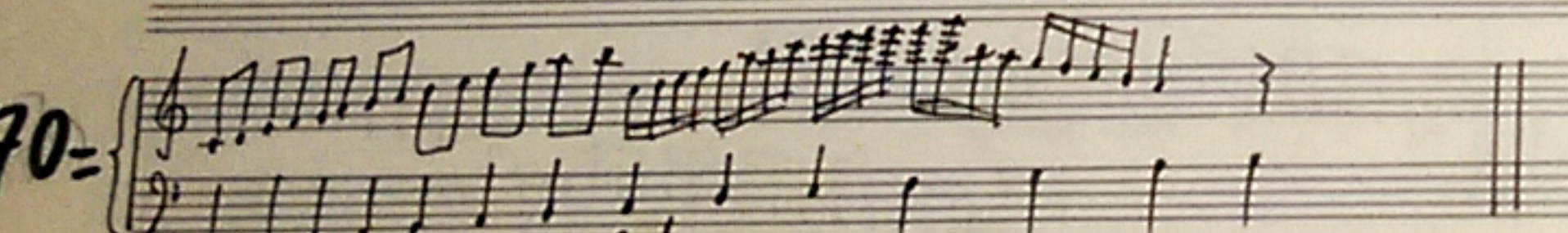
74 = 

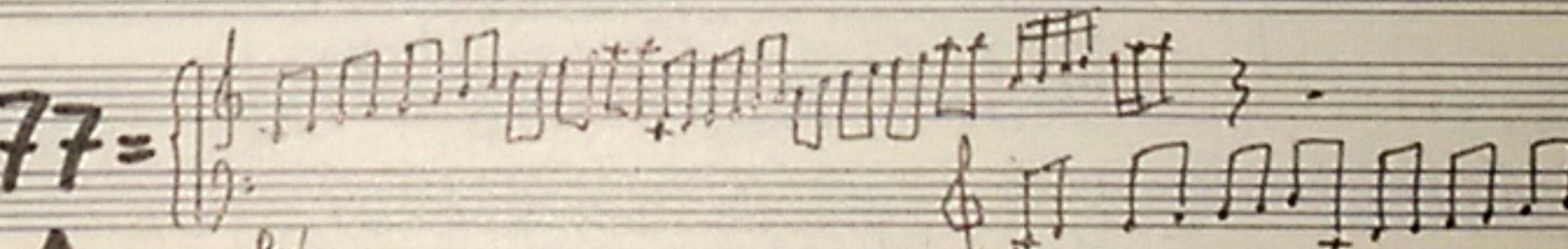
68 = 

75 = 

69 = 

76 = 

70 = 

77 = 

↑  
there you go!

... but wait, there's more!

$$78 = \left(7 - \frac{7}{7}\right) \times \left(7 + 7 - \frac{7}{7}\right)$$

$$79 = \left(77 + \frac{7 \times (7+7)}{7 \times 7}\right)$$

$$80 = \left(7 + \frac{7}{7}\right) \times \left(\frac{77-7}{7}\right)$$

$$81 = 77 + 7 - \frac{7+7+7}{7}$$

$$82 = 77 + 7 - \left(\frac{7}{7} + \frac{7}{7}\right)$$

$$83 = 77 + 7 - \frac{77}{77}$$

$$84 = (77+7) \times \frac{77}{77}$$

$$85 = 77 + 7 + \frac{77}{77}$$

$$86 = 77 + 7 + \frac{7}{7} + \frac{7}{7}$$

$$87 = 77 + \frac{77}{7} - \frac{7}{7}$$

$$88 = 77 + 7 + \left(\frac{77}{7} - 7\right)$$

$$89 = 77 + \frac{77}{7} + \frac{7}{7}$$

$$90 = \left(7 - \frac{7}{7}\right) \times \left(7 + 7 + \frac{7}{7}\right)$$

[to be continued...]