

# Schriftliches Wurzelziehen von Hand

Ha 09

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$$(1000a + 100b + 10c + d)^2 =$$

$$1000000a^2 + 2 \cdot 100000ab + 10000b^2$$

$$+ 2 \cdot 1000(10a+b) \cdot c + 100c^2$$

$$+ 2 \cdot 10(10a+10b+c) \cdot d + d^2$$

$$\sqrt{56791296} = 7536$$

- 49	7	19	→ 77	:2	38	:7	5
- 70			← 70	:2	35	:7	
- 25			← 5 <sup>2</sup>				
54	12		→ 541	:2	270	:75	3
- 450			← 450		225		
9			← 3 <sup>2</sup>				
903	96		→ 9039	:2	4520	:753	6
- 9036			← 9036		4518	:753	
36			← 6 <sup>2</sup>				
0							

$$\sqrt{357134} = 5976$$

- 25	10	71	→ 107	:2	53	:5	9
- 90			← 90		45		
81			← 9 <sup>2</sup>				
903	12		→ 903	:2	450	:59	7
- 820			← 820		413	:59	
49			← 7 <sup>2</sup>				
725	012		→ 7250	:2	3625	:597	6
- 7164			← 7164		3582	:597	
36			← 6 <sup>2</sup>				
8240	12		→ 8240		4120	:5976	0
0							
82400	012		→ 824000		41200	:59760	6
71712	0		← 717120		358560		
36			← 6 <sup>2</sup>				
106876	40		:2		5343820	:597606	8

Abbruch