

Mind Sports Olympiad 2020

Possible Calculation Categories

Exact answers must be given exactly.

Answers with infinite decimals are to be given to as much accuracy possible in 60 seconds.

For each category, some questions will be easier and some more difficult than those shown here.

There will be no explanation of the categories during the competition.

Category Name	Example Question	Answer Format
ADDITION	$1234 + 8756$	10000
SUBTRACTION	$8765 - 1234$	7531
MULTIPLICATION	234×567	132678
MULTIPLICATION	$12 \times 45 \times 78$	42120
EXACT DIVISION	$116702 / 86$	1357
DIVISION	$823 / 238$	3.45798319...
CALENDAR DATE	15/08/2020	Saturday (or) 6
PRIME FACTORS	8099	7, 13, 89
EXACT SQUARE ROOT	20857489	4567
EXACT CUBE ROOT	12895213625	2345
FRACTION ADDITION	$4 \frac{7}{8} + 3 \frac{5}{6}$	$8 \frac{17}{24}$
FRACTION SUBTRACT	$4 \frac{7}{8} - 3 \frac{5}{6}$	$1 \frac{1}{24}$
FRACTION MULTIPLY	$4 \frac{7}{8} \times 3 \frac{5}{6}$	$18 \frac{11}{16}$
FRACTION DIVISION	$4 \frac{7}{8} / 3 \frac{5}{6}$	$1 \frac{25}{92}$
NEXT SQUARE AFTER	123456	123904
POWER	1.234^8	5.37676775...
SQRT	123456	351.36306...
CUBE ROOT	123456	49.7932798...
4TH ROOT, 7TH ROOT etc.	[only in final]	[example: 3.123456...]
MIXED OPERATIONS	$(123 + 456)^2$	335241
MIXED OPERATIONS	$12 \times 34 + 56 \times 78$	4776
MIXED OPERATIONS	$(7/8)^5$	0.512908936...
MIXED OPERATIONS	[similar formats possible!]	

For queries, please contact Daniel Timms.