

# Home Schooling NZ

## Level 1 Core Numeracy

### Four Operations - Diagnostic Test

Everyday life requires a certain degree of basic mathematical ability. Historically, this has generally been accepted as knowing the basic facts ("times tables") to 12x12, and the ability to add, subtract, multiply and divide simple numbers.

For basic industry purposes, this has been the ability to add 3 digits to 3 digits, subtract 3 digits from 3 digits, multiply 3 digits by 1 digit and to divide 3 digits by 1 digit, all without the aid of a calculator.

This test is designed to see how well a student can do that.

#### INSTRUCTIONS

1. The student may have access to a pencil and an eraser **only**.
2. Issue the test to the student.
3. Explain to the student that it is a diagnostic test designed to show what they do and what they don't know - it is not the type of test where they try and get 100% for the sake of getting a good score... it is more of an X-ray to show where things aren't working as well as they should be.
4. Advise the student that it is best to work things out on paper rather than to try and do it in their heads, but that they are free to tackle each problem the way they think is best.
5. Ask the student to show all working out in the box immediately next to the question.
6. Supervise the student throughout the test, but give no help whatsoever.
7. Move the student on if they're spending undue time on one particular problem (as that will be evidenced that they do not have full competency in that particular aspect).
8. When the student has finished, please forward the completed test paper to us (as a hard copy, or scanned and emailed to [office@hsnz.org](mailto:office@hsnz.org))



1	$9 + 5 =$	5	$67 + 28 =$
2	$81 + 6 =$	6	$67 + 68 =$
3	$67 + 6 =$	7	$676 + 13 =$
4	$35 + 41 =$	8	$236 + 49 =$

9	$352 + 59 =$	13	$9 - 3 =$
10	$267 + 431 =$	14	$19 - 4 =$
11	$263 + 148 =$	15	$81 - 6 =$
12	$477 + 586 =$	16	$671 - 6 =$

17	$623 - 12 =$	21	$660 - 89 =$
18	$571 - 44 =$	22	$677 - 365 =$
19	$670 - 64 =$	23	$263 - 145 =$
20	$363 - 77 =$	24	$363 - 278 =$

25	$400 - 211 =$	29	$13 \times 2 =$
26	$32 \times 10 =$	30	$63 \times 2 =$
27	$35 \times 100 =$	31	$36 \times 2 =$
28	$65 \times 1000 =$	32	$36 \times 8 =$

33	$413 \times 2 =$	37	$408 \times 2 =$
34	$303 \times 2 =$	38	$583 \times 8 =$
35	$913 \times 2 =$	39	$503 \times 8 =$
36	$483 \times 2 =$	40	$6 \div 2$

41	$6 \div 4$	45	$63 \div 3$
42	$24 \div 8$	46	$25 \div 2$
43	$25 \div 3$	47	$65 \div 6$
44	$50 \div 8$	48	$76 \div 2$

49	$80 \div 5$	53	$827 \div 6$
50	$57 \div 2$	54	$605 \div 3$
51	$80 \div 7$	55	$600 \div 5$
52	$732 \div 6$	56	$689 \div 7$



57. A Boeing 737 plane flies at 418 kph for 4 hours. How far does it fly?

58. A plane ticket to Auckland costs \$119. A bus ticket costs \$57. How much more expensive is the plane ticket?

59. A grizzly bear can charge 325 metres in 25 seconds. How many metres per second is this?

60. In 7 days a shop has a total of 889 customers. This is an average of how many customers each day?