

# 9-12 Montessori Math Story Problem Record for \_\_\_\_\_

(/= card partially attempted;  $\wedge$ = whole card attempted with error;  $\Delta$  = whole card completed successfully)

| Drawer number and title   | Card letter   | Date mastered |
|---|---|---------------|
| 1. Whole number numeration .....  | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 2. Multiplication using "magic zeros" .....                                     | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 3. Multiplication with a 1-digit multiplier .....                               | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 4. Multiplication with a 2-digit multiplier .....                               | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 5. Multiplication with a 3-digit multiplier .....                               | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 6. Multiplication with a 4-digit multiplier .....                               | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 7. Division with a 1-digit divisor .....  | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 8. Division with a 2-digit divisor .....  | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 9. Division with a 3-digit divisor .....  | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 10. Division with a 4-digit divisor .....                                       | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 11. Divisibility .....  | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 12. Finding all factors .....   | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 13. Finding prime factorization .....   | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 14. Finding the greatest common factor .....                                    | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 15. Finding multiples .....   | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 16. Finding the least common multiple .....                                     | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 17. Equivalent fractions .....  | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 18. Changing improper fractions to mixed numbers .....                          | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 19. Reducing fractions and mixed numbers .....                                  | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 20. Comparing and ordering fractions .....                                      | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 21. Addition and subtraction of fractions with same denominators .....          | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 22. Addition and subtraction of mixed numbers with same denominators .....      | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 23. Addition and subtraction of fractions with different denominators .....     | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 24. Addition and subtraction of mixed numbers with different denominators ..... | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 25. Fractions times whole numbers .....   | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 26. Whole numbers times fractions .....   | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 27. Fractions times fractions .....   | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 28. Mixed numbers times mixed numbers .....                                     | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 29. Finding fractional parts .....  | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 30. Fractions divided by whole numbers .....                                    | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 31. Whole numbers divided by fractions .....                                    | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 32. Fractions divided by fractions .....  | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 33. Mixed numbers divided by mixed numbers .....                                | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 34. Decimal numeration .....  | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 35. Changing fractions to decimals .....  | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 36. Changing decimals to fractions .....  | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 37. Comparing and ordering fractions .....                                      | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 38. Adding and subtracting decimals .....                                       | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 39. Decimals times powers of ten .....  | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 40. Decimals times whole numbers .....  | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 41. Decimals times decimals .....   | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 42. Decimals divided by powers of ten .....                                     | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |
| 43. Decimals divided by whole numbers .....                                     | a ..... b ..... c ..... d ..... e ..... f ..... g ..... h ..... i ..... j ..... |               |

|     |  |   |   |   |   |   |   |   |   |   |   |
|-----|--|---|---|---|---|---|---|---|---|---|---|
| 44. | Whole numbers divided by decimals                            | a | b | c | d | e | f | g | h | i | j |
| 45. | Decimals divided by decimals                                 | a | b | c | d | e | f | g | h | i | j |
| 46. | Equivalence of fractions, decimals and percents              | a | b | c | d | e | f | g | h | i | j |
| 47. | Operations with fractions and decimals                       | a | b | c | d | e | f | g | h | i | j |
| 48. | Percents: finding the 'portion'                              | a | b | c | d | e | f | g | h | i | j |
| 49. | Percents: finding the 'percent'                              | a | b | c | d | e | f | g | h | i | j |
| 50. | Percents: finding the 'whole'                                | a | b | c | d | e | f | g | h | i | j |
| 51. | Ratios and proportions                                       | a | b | c | d | e | f | g | h | i | j |
| 52. | Writing exponents  | a | b | c | d | e | f | g | h | i | j |
| 53. | Solving exponents  | a | b | c | d | e | f | g | h | i | j |
| 54. | Simplifying exponents  | a | b | c | d | e | f | g | h | i | j |
| 55. | Using scientific notation                                    | a | b | c | d | e | f | g | h | i | j |
| 56. | Binomials times monomials                                    | a | b | c | d | e | f | g | h | i | j |
| 57. | Trinomials times monomials                                   | a | b | c | d | e | f | g | h | i | j |
| 58. | Binomials times binomials                                    | a | b | c | d | e | f | g | h | i | j |
| 59. | Trinomials times trinomials                                  | a | b | c | d | e | f | g | h | i | j |
| 60. | Passage from one square to another square                    | a | b | c | d | e | f | g | h | i | j |
| 61. | Squares of binomials   | a | b | c | d | e | f | g | h | i | j |
| 62. | Squares of trinomials  | a | b | c | d | e | f | g | h | i | j |
| 63. | Squares of quadrinomials                                     | a | b | c | d | e | f | g | h | i | j |
| 64. | Binomial square roots  | a | b | c | d | e | f | g | h | i | j |
| 65. | Trinomial square roots                                       | a | b | c | d | e | f | g | h | i | j |
| 66. | Quadrinomial square roots                                    | a | b | c | d | e | f | g | h | i | j |
| 67. | Passage from one cube to another cube                        | a | b | c | d | e | f | g | h | i | j |
| 68. | Cubes of binomials   | a | b | c | d | e | f | g | h | i | j |
| 69. | Cubes of trinomials  | a | b | c | d | e | f | g | h | i | j |
| 70. | Cubes of quadrinomials                                       | a | b | c | d | e | f | g | h | i | j |
| 71. | Binomial cube roots  | a | b | c | d | e | f | g | h | i | j |
| 72. | Trinomial cube roots   | a | b | c | d | e | f | g | h | i | j |
| 73. | Quadrinomial cube roots                                      | a | b | c | d | e | f | g | h | i | j |
| 74. | Number lines and coordinate grids                            | a | b | c | d | e | f | g | h | i | j |
| 75. | Adding and subtracting integers                              | a | b | c | d | e | f | g | h | i | j |
| 76. | Multiplying and dividing integers                            | a | b | c | d | e | f | g | h | i | j |
| 77. | Writing equations  | a | b | c | d | e | f | g | h | i | j |
| 78. | Solving for a variable: one step, addition or subtraction    | a | b | c | d | e | f | g | h | i | j |
| 79. | Solving for a variable: one step, multiplication or division | a | b | c | d | e | f | g | h | i | j |
| 80. | Order of operations  | a | b | c | d | e | f | g | h | i | j |
| 81. | Solving for a variable (two steps)                           | a | b | c | d | e | f | g | h | i | j |
| 82. | Solving equations: variable occurs more than once            | a | b | c | d | e | f | g | h | i | j |
| 83. | Evaluating expressions                                       | a | b | c | d | e | f | g | h | i | j |
| 84. | Solving and graphing functions                               | a | b | c | d | e | f | g | h | i | j |
| 85. | Rounding and estimating with integers                        | a | b | c | d | e | f | g | h | i | j |
| 86. | Rounding and estimating with rational numbers                | a | b | c | d | e | f | g | h | i | j |
| 87. | Money: discounts and interest                                | a | b | c | d | e | f | g | h | i | j |
| 88. | Money: taxes and commissions                                 | a | b | c | d | e | f | g | h | i | j |
| 89. | Data analysis  | a | b | c | d | e | f | g | h | i | j |
| 90. | Probability  | a | b | c | d | e | f | g | h | i | j |