# Answers for Mental Multiplication Worksheet

It is important to note that these suggested answers are just one of the many possible strategies that children may use.

1. 439 x 10
   Possible strategy:
   10 x 400 = 4 000
   10 x 30 = 300
   10 x 9 = 90
   Therefore:
   429 x 10 = 4 000 x 300 x 90 = 4 390

2. 2 x 18 x 5 = 180
   Possible strategy:
   2 x 18 x 5
   = 10 x 18
   = 180

3. 4 x 36 x 5
   Possible strategy:
   Using the known facts of the previous question.
   4 x 36 x 5
   = 4 x previous algorithm
   = 4 x 2 x 18 x 5
   = 4 x 180
   = 720

4. 102 x 21 = 2142
   Possible strategy:
   102 x 21
   = 100 x 21 + 21 x 2
   = 2100 + 42
   = 2142

5. 999 x 6 = 5994
   Possible strategy:
   999 is very close to 1000. Therefore since 1000 x 6 = 6000, 999 x 6 = 6000 – 6.

6. 25 x 8 = 200
   Possible strategy: Doubling a known fact
   25 x 8
   = 25 x 4 x 2
   = 100 x 2
   = 200

7. 25 x 9
   Possible strategy: use the previous solution
   25 x 9
   = 25 x 8 + 25
   = 200 + 25
   = 225

8. 32 x 50 = 1600
   Possible strategy: Halving and doubling
   32 x 50
   = 16 x 100
   = 1 600

9. 32 x 52 = 1664
   Possible strategy: Using previous question
   32 x 52
   = 16 x 100 + 2 x 32
   = 1600 + 64
   = 1664

10. 75 x 6 = 450
    Possible strategy:
    75 x 6
    = 3 x 25 x 6
    = 3 x 150
    = 450

11. 8 x 17 = 136
    Possible strategy: repeated doubling
    8 x 17
    = 2 x 2 x 2 x 17
    = 136

12. 13 x 12 = 156
    Possible strategy: using table knowledge
    13 x 12
    = 12 x 12 + 12
    = 139

13. 24 x 125 = 3000
    Possible strategy: Using the known fact provided
    24 x 125
    = 3 x 8 x 125
    = 3 x 1000
    = 3000

14. 26 x 7 x 33 = 6006
    Possible strategy: Using the known fact provided
    26 x 7 x 33
    = 2 x 13 x 7 x 11 x 3
    = 6 x 1001
    = 6006

15. $900 \div 225$
    Possible strategy: Using the known fact provided
    Since $30 \times 30 = 900$
    And 30 can be expressed as $2 \times 15$
    Then $30 \times 30 = 2 \times 15 \times 2 \times 15 = 900$
    Then $4 \times 225 = 900$
    Therefore there are four 225s in 900.

16. $2^{12} = 4096$
    Possible strategy: Doubling
    Since $2^{10} = 1024$
    $2^{12} = 1024 \times 2 \times 2 = 4096$