1. Write the numeral in the following problem as a decimal numeral. By decimal numeral, we mean the system we use in everyday arithmetic.

   Select the correct answer.

<p align="center">▼▼▼▼▼ꙨꙨ▼</p>

   ○ 100,010

   ○ 1,256

   ○ 261

   ○ 28

2. Write the numeral in the following problem as a decimal numeral. By decimal numeral, we mean the system we use in everyday arithmetic.

   Select the correct answer.

<p align="center">MMI</p>

   ○ 2,001

   ○ 48

   ○ 709

   ○ 1,997

3. Write the numeral in the problem in the Roman system.

Select the correct answer.

521

○ XLVII

○ LXXV

○ CCLVIII

○ DXXI

4. Perform the indicated operations in the following problem.

Select the correct answer.

$$99 \cap \cap ||$$
$$- \quad 9 \begin{smallmatrix}\cap\cap\cap\cap\\\cap\cap\cap\cap\end{smallmatrix} |||||$$

○ $9 \begin{smallmatrix}\cap\cap\cap\cap\\\cap\cap\cap\cap\end{smallmatrix} ||||| \, ||$

○ $\cap\cap\cap \; |||||\,||$

○ $\vartheta\vartheta\vartheta\vartheta\vartheta$

○ $999 \cap ||||| \; |||$

5. Give the meaning of the numeral 5 in 58,000,000.

Select the correct answer:

○ 5 thousandth

○ 5 hundreds

○ 5 ten-millions

○ 5 units

6. Write 5×10^{-4} in decimal notation.

Select the correct answer.

○ 0.00005

○ -50000

○ -5000

○ 0.0005

7. Write the number in decimal notation.

Select the correct answer.

$$4 \times 10^{1} + 9 \times 10^{0} + 8 \times 10^{-1} + 7 \times 10^{-2} + 8 \times 10^{-3}$$

○ 49.878

○ 4.9878

○ 498.78

○ 87.894

8. Write 16.432 in expanded notation.

Select the correct answer.

○ $1 \times 10^{2} + 6 \times 10^{1} + 4 \times 10^{0} + 3 \times 10^{-1} + 2 \times 10^{-2}$

○ $1 \times 10^{1} + 6 \times 10^{0} + 4 \times 10^{-1} + 3 \times 10^{-2} + 2 \times 10^{-3}$

○ $2 \times 10^{1} + 3 \times 10^{0} + 4 \times 10^{-1} + 6 \times 10^{-2} + 1 \times 10^{-3}$

○ $1 \times 10^{0} + 6 \times 10^{-1} + 4 \times 10^{-2} + 3 \times 10^{-3} + 2 \times 10^{-4}$

9. Change the numbers to base ten.

Select the correct answer.

$$973_{\,twelve}$$

○ 1,383

○ 1,152

○ 1,371

○ 1,191

10. Change the number to base ten.

Select the correct answer.

$$1110.11_{\,two}$$

○ 14.75

○ 13.52

○ 15.86

○ 17.47

11. Change 2,337 to base seven.

Select the correct answer.

○ 6106_{seven}

○ 6550_{seven}

○ 6546_{seven}

○ 6646_{seven}

12. Change 726 to base twelve.

Select the correct answer.

○ 506_{twelve}

○ 556_{twelve}

○ 500_{twelve}

○ 510_{twelve}

13. Change 121 days to weeks and days.

Select the correct answer.

○ 19 weeks, 1 days

○ 16 weeks, 3 days

○ 17 weeks, 3 days

○ 17 weeks, 2 days

14. Write the number as a decimal numeral.

Select the correct answer.

$$1111_{\,two}$$

- ○ 26
- ○ 18
- ○ 15
- ○ 13

15. Write the number as a binary numeral.

$$11$$

Select the correct answer.
- ○ $1011_{\,two}$
- ○ $1010_{\,two}$
- ○ $1111_{\,two}$
- ○ $1001_{\,two}$

16. Perform the indicated operation .

Select the correct answer.

$$1011_{two}$$
$$+1100_{two}$$

- ○ 1011_{two}
- ○ 10110_{two}
- ○ 10111_{two}
- ○ 11010_{two}

17. Perform the indicated operation .

Select the correct answer.

$$10111_{two}$$
$$-\ \ 1011_{two}$$

○ 1001_{two}

○ 1100_{two}

○ 1010_{two}

○ 110_{two}

18. Convert the number to the binary system.

$$347_{eight}$$

Select the correct answer.

○ $011\ 100\ 111_{two}$

○ $011\ 101\ 111_{two}$

○ $111\ 111\ 000_{two}$

○ $100\ 100\ 111_{two}$

19. Convert the number to the octal system.

$$110_{two}$$

Select the correct answer.

○ 10_{eight}

○ 6_{eight}

○ 8_{eight}

○ 5_{eight}

20. Convert the number to the octal system.

$$11\ 101\ 111\ _{two}$$

Select the correct answer.

◯ $350\ _{eight}$

◯ $357\ _{eight}$

◯ $557\ _{eight}$

◯ $347\ _{eight}$

MASC 1024 Test 2, Practice Test

1. 261
2. 2,001
3. DXXI
4. ⊓⊓⊓ ||||| ||
5. 5 ten-millions
6. 0.0005
7. 49.878
8. $1 \times 10^{1} + 6 \times 10^{0} + 4 \times 10^{-1} + 3 \times 10^{-2} + 2 \times 10^{-3}$
9. 1,383
10. 14.75
11. 6546_{seven}
12. 506_{twelve}
13. 17 weeks, 2 days
14. 15
15. 1011_{two}
16. 10111_{two}
17. 1100_{two}
18. $011\ 100\ 111_{two}$
19. 6_{eight}
20. 357_{eight}