

LEMOYNE-OWEN COLLEGE  
DIVISION OF NATURAL SCIENCES, MATHEMATICS AND COMPUTER SCIENCE

MATH 120  
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Quiz 4

***Show your work***

Name: \_\_\_\_\_

1. Write 6549 in expanded form.

$$6549 = \underline{\hspace{1cm}} \times 10^{(\quad)} + \underline{\hspace{1cm}} \times 10^{(\quad)} + \underline{\hspace{1cm}} \times 10^{(\quad)} + \underline{\hspace{1cm}} \times 10^{(\quad)}$$

2. Simplify the following expansion.

$$2 \times 10^4 + 8 \times 10^3 + 3 \times 10^2 + 4 \times 10^1 + 5 \times 10^0 = \underline{\hspace{3cm}}$$

3. Convert  $436_{\text{seven}}$  to a decimal form (base ten).

(a) By expanding in powers:

$$\underline{\hspace{1cm}} \times 7^2 + \underline{\hspace{1cm}} \times 7^1 + \underline{\hspace{1cm}} \times 7^0 = \underline{\hspace{2cm}}.$$

(b) By using the calculator shortcut:

$$(\underline{\hspace{1cm}} \times 7 + \underline{\hspace{1cm}}) \times 7 + \underline{\hspace{1cm}} = \underline{\hspace{2cm}}.$$

4. Convert  $53AF_{\text{sixteen}}$  to a decimal form (base ten).

5. Convert 6531 to base eight.