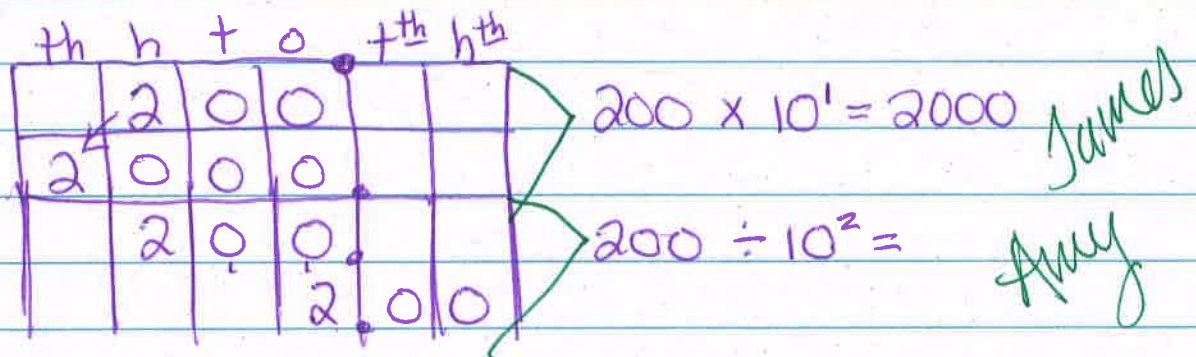


M1L5: Writing Numbers Using Different Forms

James measures the desk as 2000 mm

Amy measures the desk as 2 m



Word Form: using words

Three thousand forty-seven

Standard Form: using numbers/digits

3,047

Expanded Form: shows how much each digit is worth and that number w/ the totals of values.

$$(3 \times 1000) + (4 \times 10) + (7 \times 1)$$

$$3000 + 40 + 7$$

Unit Form: size of the unit with how many there are
3 thousands 4 tens and ~~seven~~ 7 ones

$$\text{One thousandths} = 0.001 = \frac{1}{1000}$$

$$\frac{1}{1000} = (1 \times \frac{1}{1000})$$

$$0.001 = (1 \times 0.001)$$

1 thousandths

$$\text{Three thousandths} = 0.003 = \frac{3}{1000}$$

$$\frac{3}{1000} = (3 \times \frac{1}{1000})$$

$$0.003 = (3 \times 0.001)$$

3 thousandths

$$\text{Thirteen thousandths} = 0.013 = \frac{13}{1000}$$

$$\frac{13}{1000} = (1 \times \frac{1}{100}) + (3 \times \frac{1}{1000})$$

$$0.013 = (1 \times 0.01) + (3 \times 0.001)$$

1 hundredth 3 thousandths

13 thousandths

25.413

Twenty-five and four hundred thirteen thousandths

25.413

$25 \frac{413}{1000}$

$$25 \frac{413}{1000} = (2 \times 10) + (5 \times 1) + (4 \times \frac{1}{10}) + (1 \times \frac{1}{100}) + (3 \times \frac{1}{1000})$$

$$25.413 = (2 \times 10) + (5 \times 1) + (4 \times 0.1) + (1 \times 0.01) + (3 \times 0.001)$$

2 tens 5 ones 4 tenths 1 hundredth 3 thousandths

25 ones 413 thousandths

400.004

0.404

Name _____

Date _____

1. Express as decimal numerals. The first one is done for you.

a. Four thousandths	0.004 [?]
b. Twenty-four thousandths	0.024
c. One and three hundred twenty-four thousandths	
d. Six hundred eight thousandths	0.608
e. Six hundred <u>and</u> eight thousandths	600.008
f. $\frac{46}{1000}$	0.046
g. $3\frac{946}{1000}$	3.946
h. $200\frac{904}{1000}$	200.904

2. Express each of the following values in words.

a. 0.005

b. 11.037

c. 403.608

Eleven and thirty-seven thousandths

3. Write the number on a place value chart. Then, write it in expanded form using fractions or decimals to express the decimal place value units. The first one is done for you.

a. 35.827

Tens	Ones		Tenths	Hundredths	Thousandths
3	5	●	8	2	7

$$35.827 = 3 \times 10 + 5 \times 1 + 8 \times \left(\frac{1}{10}\right) + 2 \times \left(\frac{1}{100}\right) + 7 \times \left(\frac{1}{1000}\right) \text{ or}$$

$$= 3 \times 10 + 5 \times 1 + 8 \times 0.1 + 2 \times 0.01 + 7 \times 0.001$$