

MTH 151 Homework #3 Key

- 1a. 456 c. 43,628
- b. 265 d. 258,458
- e. 3,244 e. 1,200,013
- f. 21,237

- 2. a. @@@@ nn IIII
 III
- b. 
- c. 
- d. 

- 3. a. 173 d. 1597
- b. 14 e. 1944
- c. 115,559 f. 5,121,400

- 4a. MM DCC CLXI c. ~~XXV~~ DCXIX
- b. DCC XLIX d. VI CDII DXXIV

- 5a. 13 c. 21
- b. 119 e. 53
- c. 6,700 f. 70,590

- 6a. 九百六十五 b. 七千一十二
- c. 六十七 d. 二千四百一十六

- 7a.
$$\begin{array}{r} M \ C C \ X X \ III \\ M \ C \ X \ IIII \\ \hline MM \ CCC \ XXX \ VII \end{array}$$
- b.
$$nn \ IIII + n \ II = \begin{array}{r} nn \\ nn \end{array} II$$

7b. $\begin{matrix} \text{eee} \\ \text{eee} \\ \text{eee} \end{matrix} \text{m} \parallel - \begin{matrix} \text{eee} \\ \text{eee} \\ \text{eee} \end{matrix} \text{n} \parallel = \text{ee} \parallel$

c. $\begin{array}{r} \bar{7} + 7 \\ + 5 + 4 \\ \hline - 100 + - \end{array}$

d. $\begin{array}{r} 9 + 4 \\ - 4 + 3 \\ \hline 5 + - \end{array}$

8a. 45

d. 54

b. $60 + 14 = 74$

e. $(42) \times 60 + 34 = 2554$

c. 47

f. $60^4 + 24 \times 60^3 + 10 \times 3600 + 1 \times 60 + 2 = 12,960,000 + 5,184,000 + 36,000 + 60 + 2 = 18,180,062$

9a. $\triangleleft \blacktriangledown \blacktriangledown$

c. $\begin{matrix} \blacktriangledown \blacktriangledown \blacktriangledown \\ \blacktriangledown \blacktriangledown \blacktriangledown \end{matrix} \triangleleft \triangleleft \blacktriangledown \blacktriangledown$

b. $\triangleleft \blacktriangledown \blacktriangledown \quad \begin{matrix} \blacktriangledown \blacktriangledown \blacktriangledown \\ \blacktriangledown \blacktriangledown \end{matrix}$ which could also be 725

d. $\blacktriangledown \triangleleft \triangleleft \begin{matrix} \blacktriangledown \blacktriangledown \blacktriangledown \\ \blacktriangledown \blacktriangledown \blacktriangledown \end{matrix} \triangleleft \triangleleft$

10a. $11 \times 8000 + 8 \times 400 + 2 \times 20 + 10 = 91,250$

b. $7 \times 160,000 + 13 \times 100 + 9 = 1,125,209$

c. $1 \times 8000 + 3 \times 400 + 6 \times 20 + 17 = 9337$

d. $11 \times 329,000 + 14 \times 800 + 17 \times 20 + 8 = 3,531,348$

e. $6 \times 400 + 8 \times 20 + 0 = 2560$

11a. $\begin{matrix} \bullet \\ \bullet \bullet \\ \bullet \bullet \bullet \end{matrix} \quad \text{b.} \quad \begin{matrix} = \\ \bullet \bullet \bullet \end{matrix} \quad \text{c.} \quad \begin{matrix} \bullet \bullet \\ \bullet \bullet \bullet \end{matrix} \quad \text{d.} \quad \begin{matrix} = \\ \bullet \bullet \bullet \\ \bullet \bullet \bullet \end{matrix}$

12a. 234
b. 9566

c. 50872
d. 981

13a. 9β
b. $\theta w l \delta$

c. $\tau 9x$
d. $M, 84kC$

14. a. $7 \times 10^1 + 3 \times 10^0$
b. $2 \times 10^2 + 6 \times 10^1 + 5 \times 10^0$
c. $8 \times 10^3 + 3 \times 10^2 + 3 \times 10^1 + 5 \times 10^0$
d. $1 \times 10^4 + 2 \times 10^3 + 3 \times 10^2 + 9 \times 10^1 + 8 \times 10^0$

15a.

	3	2	
2	$\frac{2}{1}$	$\frac{1}{4}$	7
3	$\frac{0}{9}$	$\frac{0}{6}$	3
	3	6	

$\Rightarrow 2,336$

b.

	5	2	6	
2	$\frac{2}{0}$	$\frac{0}{8}$	$\frac{2}{4}$	4
5	$\frac{4}{0}$	$\frac{1}{6}$	$\frac{3}{2}$	8
5	$\frac{3}{0}$	$\frac{1}{2}$	$\frac{3}{6}$	6
6	$\frac{1}{5}$	$\frac{0}{6}$	$\frac{1}{8}$	3
	3	3	8	

$2,556,338$

16. a. 7030
b. 555,615
c. 3,526,000
d. 4,770