

MATH 01 - Arithmetic, Sec. 9767-D10

First test. Time allowed: two hours. Professor Luis Fernández

NAME: \_\_\_\_\_

**INSTRUCTIONS:** Solve the following exercises. **You must show work** in order to receive credit in any of the exercises. This includes all **sums, long divisions**, etc.

[10] **1.** Add:

a)  $1253 + 6426$

b)  $14532 + 37489$

c)  $12153 + 243 + 13$

d)  $7567 + 2434$

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[10] **2.** Subtract:

a)  $9653 - 6421$

b)  $4532 - 3489$

c)  $12153 - 173$

d)  $10001 - 4369$

[10] **3.** Multiply:

a)  $9653 \times 23$

b)  $4532 \times 344$

c)  $121 \times 1731$

d)  $4369 \times 10001$

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[10] **4.** Divide:

a)  $9653 \div 21$

b)  $4532 \div 348$

c)  $17299 \div 173$

d)  $23312 \div 232$

[10] **5.** Find the average of the following sets of numbers:

a) 3, 5, 7, 4, 8, 9.

b) 32, 54, 37, 45, 67

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[10] **6.** Suppose that the final grade in this class is given by the **average** of the grades in **four exams**. If your grades in the **first three** exams are 92, 78 and 89, what do you need to get in the last exam so that your final average is 85?

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[10] **7.** Find the value of the following expressions.

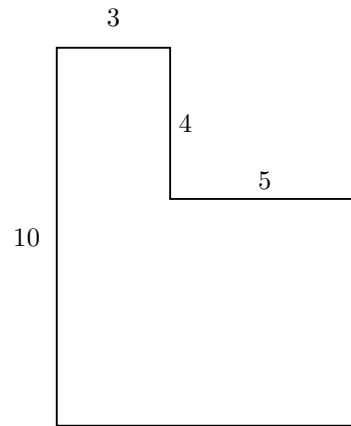
a)  $6 + 4 \times 5$

b)  $4 + 6 - 5 + 12 - 4$

c)  $2 \times 6^2 - (6 + 4) \times 5 - (8 \div 4 + 1)$

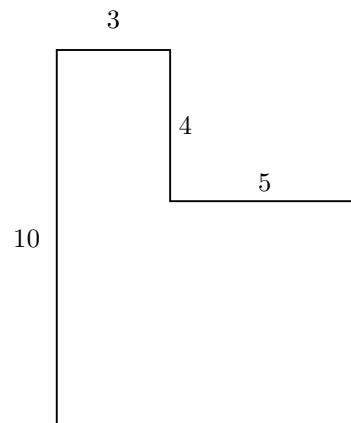
d)  $4 \times 6 \div 3 \div 2$

[10] **8.** Find the perimeter of the following figure.



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[10] **9.** Find the area of the following figure.



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[5] **10.** Convert the following improper fractions into mixed numbers.

a)  $\frac{7}{4} =$

b)  $\frac{172}{11} =$

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[5] **11.** Convert the following mixed numbers into improper fractions.

a)  $3\frac{2}{5} =$

b)  $18\frac{16}{13} =$