

MATH 01 - Arithmetic, Sec. 9777-D20

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) $2441 + 5432$

b) $24975 + 34422$

c) $24413 + 432 + 25$

d) $6877 + 3126$

[10] **2.** Subtract:

a) $8543 - 5412$

b) $4975 - 3898$

c) $24413 - 433$

d) $10002 - 3126$

[10] **3.** Multiply:

a) 8543×32

b) 4975×389

c) 244×4331

d) 3126×10002

[10] **4.** Divide:

a) $8543 \div 23$

b) $4975 \div 389$

c) $14499 \div 145$

d) $34423 \div 343$

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

a) 4, 6, 8, 5, 9, 10.

b) 33, 55, 38, 46, 68

[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 94, 82 and 88, what do you need to get in the last exam so that your final average is 85?

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

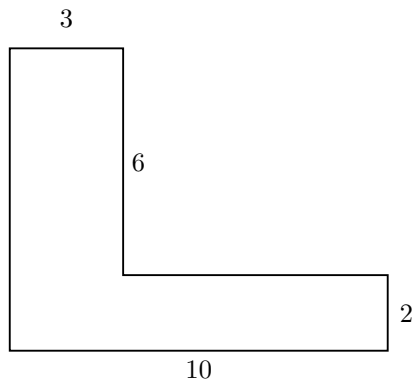
a) $7 + 3 \times 4$

b) $4 + 8 - 3 + 17 - 6$

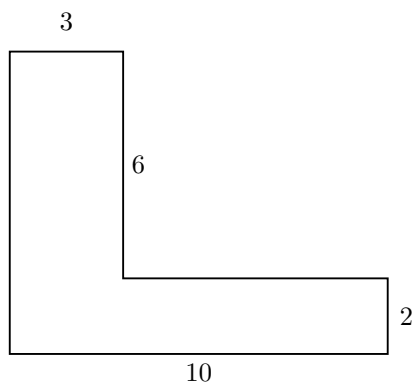
c) $2 \times 7^2 - (7 + 3) \times 4 - (6 \div 3 + 1)$

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

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



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



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

a) $\frac{8}{5} =$

b) $\frac{211}{12} =$

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

a) $5\frac{3}{7} =$

b) $17\frac{13}{15} =$