

MATH 01 - Arithmetic, Sec. 9777-D20

Third Test. Time allowed: two hours. Professor Luis Fernández

NAME: _____

INSTRUCTIONS:

- Solve the following exercises.
 - **In order to receive credit in any of the exercises YOU MUST SHOW WORK.**
 - All the fractions in your answers must be written **in lowest terms**.
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[4] **1.** Add:

a) $5.14 + 14.4 =$

b) $1352.07 + 0.032 =$

[4] **2.** Subtract:

a) $54.78 - 26.46 =$

b) $143.806 - 0.076 =$

[4] **3.** Multiply:

a) $1.02 \cdot 14.002 =$

b) $0.052 \cdot 123.4 =$

[4] **4.** Divide. Round off to the nearest hundredth.

a) $54.78 \div 12 =$

b) $1.224 \div 0.025 =$

[4] **5.** Find the exact value of $84.4 \div 6 =$

[6] **6.** Convert. Do not forget to write all fractions in lowest terms.

a) 0.78 to percent.

b) 0.77 to fraction.

c) 47% to decimal.

d) 47% to fraction.

e) $\frac{4}{5}$ to decimal.

f) $\frac{4}{5}$ to percent.

[6] **7.** Find

a) $\frac{7}{6}$ of 78.

b) 31% of 57.

[8] **8.** Solve the following proportions.

a) $\frac{7}{3} = \frac{x}{21}$.

b) $\frac{50}{150} = \frac{73}{y}$.

[10] **9.** What percent of 40 is 24?

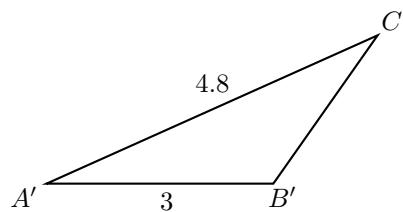
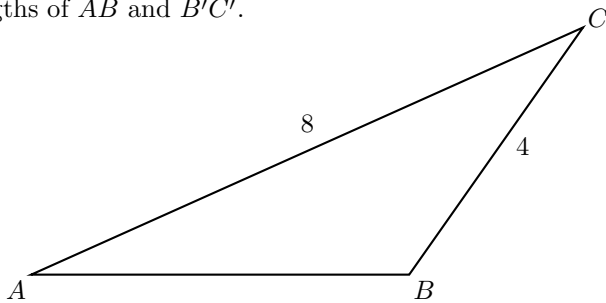
[10]**10.** 30 is 12% of what number?

[10]**11.** Jane's annual salary was \$28,450. She got a 7% raise. What is her new annual salary?

[10]12. Four students finish a class for every five students who begin. For 24 students to finish, how many must have begun the class?

[10]13. On a test Bill answered 36 problems correctly and scored 75%. How many problems were on the test?

- [10]14. In the following triangles, $\angle A = \angle A'$, $\angle B = \angle B'$, and $\angle C = \angle C'$. Given the lengths in the picture, find the lengths of \overline{AB} and $\overline{B'C'}$.



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- [10]15. Add the following numbers.

a) $(-6) + (-4) =$

b) $(-41) + 36$

c) $(-6.5) + (-44.2) =$

d) $5.1 + (-14.2)$

e) $\left(-\frac{4}{5}\right) + \frac{2}{3} =$