

M007 – Elementary Algebra

Practice Quiz 2 (1.7-1.8, 2.1-2.4)

Note: This review sheet was created to correspond with the second quiz in M007. As such, this document is only to help you review the concepts presented in your text. Each instructor may have other specific problems you should review in order to be prepared for quizzes and/or exams in your section of the course.

1. Simplify the following expression using order of operations.(Section 1.8)

a. $\frac{7^2 - (-1)^5}{3 - 2 \cdot 3^2 + 5}$

b. $2 + 3|2 + (3 - 9)|$

2. Solve the equation for the given variable. (Section 2.1, 2.2)

a. $z - 11 = 13$

f. $-8 + 5x = 7(x - 6)$

b. $\frac{-2}{7}x = -16$

g. $5a + 3 = 41$

c. $7y + 11 = 6y + 4$

h. $\frac{1}{4}w - \frac{1}{8}w = 3 - \frac{1}{16}w$

d. $-\frac{5}{6} + d = \frac{-2}{3}$

i. $32 - 7x = 11$

e. $6(x + 3) = 96$

j. $3p + 5 - p = 7 + 3p - 6$

3. Solve each formula for the indicated letter. (Section 2.3)

a. $y = 4x + 7$ for x

c. $A = \frac{a + b + c}{3}$ for a

b. $A = \frac{h}{2}(b + c)$ for b

d. $N = fg + bg$ for f

4. The wavelength w , in meters per cycle, of a musical note is given by $w = \frac{r}{f}$, where r is the speed of the sound, in meters per second, and f is the frequency, in cycles per second. The speed of sound in air is 344m/sec. What is the wavelength of a note whose frequency in air is 24 cycles per second? (Section 2.3)
5. To obtain a bachelor's degree in nursing, Frank must complete 125 credit hours of instruction. If he has completed 60% of his requirement, how many credits did Frank complete? (Section 2.4)
6. A tax exempt school group received a bill of \$157.41 of educational software. The bill incorrectly included sales tax of 6%. How much should the school group pay? (Section 2.4)