

### COMMONLY ASKED QUESTIONS

#### What is the test used for?

The diagnostic math test is used to determine a student's quantitative proficiency. (A GMAT or GRE is not required but is acceptable) If the diagnostic math test score is below a set mark, the applicant will be required to complete the MBA 501 – Foundational Math for MBA class at Malone College or an approved math course elsewhere.

#### Is the math test required?

Yes, or you can choose to take the class listed above.

#### How long does it take?

The test itself usually takes 30-60 minutes to complete and there will be approximately 20-25 questions, mostly algebraic problems.

#### What should I bring?

3 pencils, erasers, scrap paper and a calculator that is **not** a graphing or programmable type. A calculator is available for your use in the Graduate Office.

#### How do I schedule the test?

Call the Graduate Admissions and Student Services office at 1-800-257-4723 ext. 8224

#### When can I take the test?

Testing is usually available Monday through Friday from 8:30 a.m. - 3:30 pm.

#### How much does it cost?

There is no charge for the test.

### REVIEW THE FOLLOWING CONCEPTS:

#### 1. Arithmetic operations with positive and negative numbers:

Ex:  $-5 - 6$ ;  $(-5)(-6)$ ;  $-5 + 6$ ;  $5(-6)$ ; etc

#### 2. Order of operations in arithmetic calculations:

Ex  $10 - 6 \cdot 3^2$

#### 3. Simplify algebraic expressions:

Ex.  $4x - 2 + 7x + 5$ ;  
 $(9x + 4) - (2x - 8)$ ;  
 $4x(3x + 2)$ ;  
 $(2x + 1)(6x - 3)$ ; etc

#### 4. Use the properties of exponents to simplify:

Ex.  $3^4$   
 $8^{2/3}$ ;  $25^{1/2}$   
 $x^{-2}$ ;  $2^{-3}$ ;  
 $(3x^2)^4$   
 $x^8 \div x^2$ ; etc.

#### 5. Solve quadratic equations:

Ex:  $x^2 - 8x + 12 = 0$ ;  
 $9x^2 = 16$ ; etc.

\*An **ANSWER KEY** for this study guide is available at [www.malone.edu/mba](http://www.malone.edu/mba). Click on "admission requirements."

#### 6. Evaluate "sigma" expressions;

Ex.  $\sum_{a=4}^7 (a + 5)$

#### 7. Sketching graphs;

Ex.  $y = 4x - 3$ ;  
 $2x + 3y = 12$ ;  
 $y = x^2$ ; etc.

#### 8. Solve a system of linear equations;

Ex.  $\begin{cases} 2x + y = 21 \\ x - 2y = 3 \end{cases}$

#### 9. Given two points on a line, write the equation of the line in $y = mx + b$ form;

Ex. Write the equation of the line that passes through the points (1, 5) and (3, 9)

#### 10. Evaluate factorial notation;

Ex.  $5!$   
 $8! \div 6!$  etc

#### 11. Work with formulas:

Ex. Find A if  $A = Pe^{rt}$  where  $P = \$1,000$ ,  $r = 4.2\%$ , and  $t = 3$  years. (Note:  $e \approx 2.72$ )