## Standard 3 Practice Set

## Knowledge of the concepts and relationships in number systems

Directions: Answer the following questions. You may use a calculator if needed. Check your answers using the answer key at the end of this practice set.

Many early civilizations developed number systems. List at least one feature of the numbering system of each of the following civilizations:

- 1. Mayan
- 2. Egyptian
- 3. Greek

In this activity, you will classify numbers by category. On the line to the left of each number in Column A, write the letter of the number category in Column B to which the number belongs. Some numbers may belong to more than one category; include all correct answers in your response. Each item in Column B may be used once, more than once, or not at all.

Column A		<u>Column B</u>		
 4.	7/8		A.	Imaginary
 5.	-18		B.	Integer
 6.	14 <i>i</i>		C.	Irrational
 7.	-10/3		D.	Rational
 8.	$\sqrt{22}$		E.	Whole
 9.	√-144			
 10.	√144			

## Answer Key for Standard 3 Practice Set

- 1. Mayan: Base 20, two symbols (dot and dash), numbers written vertically
- 2. Egyptian: Base 10, special signs for each power of 10, written right to left, included four operations (add, subtract, multiply, divide)
- 3. Greek: Numbers based on alphabet symbols, no symbol for zero
- 4. 7/8 D
- 5. -18 B, D
- 6. 14*i* A
- 7. -10/3 D
- 8. √22 C
- 9. √-49 A
- 10. √49 B, D, E