

SKILLS LIST and SAMPLE ITEMS

FOR

PRACTICE TEST FOR MATHEMATICS, GRADE 8

(Test items developed for skills measured in SOL*)

Skills

- | | |
|-------------------------------------|--|
| 1.0 Number and Number Sense | 3.0 Probability and Statistics |
| 1.1 Use Proportions | 3.1 Analyze Problem Situations |
| 1.2 Simplify Numerical Expressions | 3.2 Line/Bar/Circle/Picture Graphs
and Histograms |
| 1.3 Subsets | 3.3 Organize and Describe Data |
| 2.0 Measurement and Geometry | 4.0 Patterns, Functions, and Algebra |
| 2.1 Vertical Angles and Angles | 4.1 Functional Relationships |
| 2.2 Volume and Surface | 4.2 Multi-Step Equations |
| 2.3 Transformations | 4.3 Linear Equations |
| 2.4 Plane Figures and Solid Figures | 4.4 Tables/Graphs/Rules |
| 2.5 Pythagorean Theorem | 4.5 Proportions/Formulas/Functions |
| | 5.0 Computation and Estimation |
| | 5.1 Word Problems |
| | 5.2 Algebraic Expression |
| | 5.3 Whole Numbers/Square |
-

Number of questions: 60

Number of pages: 19

(c) EPES TESTING, INC.

(OVER)

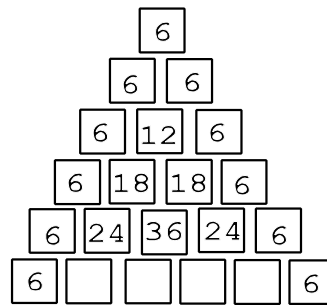
SOL PRACTICE TEST IN MATHEMATICS - GRADE 8

1. Which of these number sentences represents another way to write 3^5 ?

- A. 3×5
 - B. $5 \times 5 \times 5$
 - C. $3 \times 3 \times 3 \times 3 \times 3$
 - D. $3 \times 5 \times 5 \times 5$
-

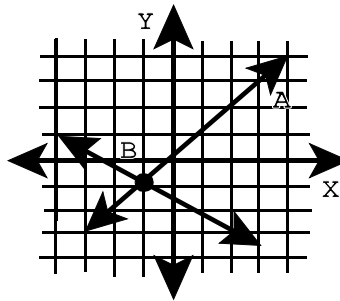
2. If the pattern shown in this figure continues, what numbers would go in the empty squares?

- A. 24, 36, 36, 24
- B. 30, 60, 60, 30
- C. 12, 24, 24, 12
- D. 18, 12, 12, 18



3. On the graph below, what ordered pair best represents the intersection of line A and line B?

- A. $(-1, -1)$
- B. $(-1, 1)$
- C. $(2, -1)$
- D. $(-2, 1)$



4. A carton contains 4 red buttons, 2 blue buttons, and 1 each of orange, yellow, and pink buttons. If you were to pick a button out of the carton, what is the probability of choosing a red button?

- A. $\frac{1}{9}$
- B. $\frac{2}{9}$
- C. $\frac{3}{9}$
- D. $\frac{4}{9}$