

SKILLS LIST and SAMPLE TEST ITEMS

FOR

PRACTICE TEST FOR MATHEMATICS, GRADE 8

(Test items developed for skills measured in GA03)

Skills

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|-----|--|-----|--|
| 1.0 | Number Sense and Numeration | 4.0 | Statistics and Probability |
| 1.1 | Fundamental Characteristics | 4.1 | Collects, Organizes, and Displays Data |
| 1.2 | Place Value | 4.2 | Probability |
| 1.3 | Properties of Numbers | 4.3 | Identifies Outcomes of Events |
| 2.0 | Geometry and Measurement | 4.4 | Mean, Mode, Median, and Range |
| 2.1 | Characteristics of Shapes; Classifying Plane and Solid Figures | 5.0 | Computation and Estimation |
| 2.2 | Appropriate Units/Instruments | 5.1 | Properties of Addition and Multiplication |
| 2.3 | Formulas Related to Plane and Solid Figures | 5.2 | Operations in Computation and Problem Solving (Whole Numbers/Fractions/Decimals/Mixed Numbers) |
| 3.0 | Patterns and Relationships | 5.3 | Estimation and Mental Computation |
| 3.1 | Number Relations | 5.4 | Computes Percent |
| 3.2 | Predicts and Completes Patterns | 6.0 | Problem Solving |
| 3.3 | Uses Order of Operations | 6.1 | Interprets Data/Appropriate Graphs |
| 3.4 | Solves Equations | 6.2 | Problem Solving Strategies |

Number of questions: 60

Number of pages: 12

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(OVER)

**GA03 PRACTICE TEST IN MATHEMATICS - GRADE 8
FORM A**

SECTION 1

Read each question and choose the correct answer.

SAMPLE

Mr. Plunket has graded 12 of the 18 projects turned in this morning. What percent has he graded?

- A. 67%
- B. 65%
- C. 60%
- D. 57%

1. Which of the following is the rule for the given pattern?

0, 1, 4, 9, 16, 25, ...

- A. $x + x$
- B. x^2
- C. $2x$
- D. $x + 3$

2. There are 250 pets to feed at the Parkview Zoo. Rosaland is responsible for 30% of them. Use mental math to determine the number of animals Rosaland must feed.

- A. 30
- B. 65
- C. 75
- D. 125

3. James played 3 games of solitaire on Monday. On Tuesday he played 8 more than on Monday, and on Wednesday he played 4 more than on Monday. How many games did he play in all?

- A. 14
- B. 19
- C. 21
- D. 29

4. The speed of light is 186,000 miles per second. Which of the following is the scientific notation for this speed?

- A. 1.86×10^5
- B. 186×10^3
- C. 1.86×10^{-5}
- D. 18.6×10^4

5. Alan is measuring the surface area of his basketball. Which unit should he use?

- A. square inches
- B. square feet
- C. cubic inches
- D. cubic yards

6. Which of the following lists the fractions $\frac{5}{6}$, $\frac{11}{15}$, $\frac{2}{3}$, $\frac{4}{5}$ from least to greatest?

- A. $\frac{11}{15}$, $\frac{5}{6}$, $\frac{4}{5}$, $\frac{2}{3}$
- B. $\frac{2}{3}$, $\frac{11}{15}$, $\frac{4}{5}$, $\frac{5}{6}$
- C. $\frac{4}{5}$, $\frac{5}{6}$, $\frac{2}{3}$, $\frac{11}{15}$
- D. $\frac{2}{3}$, $\frac{4}{5}$, $\frac{5}{6}$, $\frac{11}{15}$

7. Marsha is making punch for the party on Friday. She needs $2\frac{1}{2}$ gallons of ginger-ale, $\frac{1}{3}$ gallon of fruit juice, and $\frac{2}{3}$ gallon of water. Use mental math to determine the amount of punch her recipe will make.

- A. $2\frac{5}{8}$ gallons
- B. 3 gallons
- C. $3\frac{1}{2}$ gallons
- D. $3\frac{2}{3}$ gallons