

SKILLS LIST and SAMPLE ITEMS

FOR

PRACTICE TEST FOR MATHEMATICS, GRADE 11 - FORM B
(Test items developed for skills measured in ALABAMA*)

Skills

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|--|---|
| 1.0 Algebra | 6.0 Problem Situations |
| 1.1 Apply Order of Operations | 6.1 Translate Verbal or Symbolic;
Graph: Equations, Inequalities |
| 1.2 Add and Subtract Polynomials | 7.0 Use Algebra and Geometry
Concepts |
| 1.3 Multiply Polynomials | 7.1 Apply Properties and
Relationships Between Angles |
| 1.4 Factor Polynomials | 7.2 Apply Pythagorean Theorem |
| 2.0 Equations and Inequalities | 7.3 Apply Properties of Similar
Polygons |
| 2.1 Solve Multi-Step Equations | 7.4 Apply Properties of Geometric
Figures |
| 2.2 Solve Quadratic Equations | 7.5 Determine Measures of Central
Tendency |
| 2.3 Solve Systems of Linear
Equations | 7.6 Determine Probabilities |
| 2.4 Solve Multi-Step Inequalities | 7.7 Solve Problems: Direct
Variation |
| 3.0 Apply Concepts Related to
Functions | 7.8 Solve Problems: Algebraic
Concepts |
| 3.1 Identify Functions | |
| 3.2 Find the Range of Functions | |
| 4.0 Apply Formulas | |
| 4.1 Perimeter, Circumference,
Area, Volume | |
| 4.2 Distance, Midpoint, Slope | |
| 5.0 Graphing Techniques | |
| 5.1 Graph: Linear Equations;
Common Relations | |
| 5.2 Graph Lines | |
| 5.3 Determine Solution Sets of
Inequalities | |
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Number of questions: 100

Number of pages: 18

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(OVER)

**ALABAMA PRACTICE TEST IN MATHEMATICS - GRADE 11
FORM B**

1. Simplify: $3(5-9)^2 \div 8-4$

- A. 2
- B. 6
- C. 12
- D. 36

2. Simplify: $-3|4|-2|-5|$

- A. -120
- B. -22
- C. -2
- D. 22

3. Simplify: $5x-3(7+2x)-6x$

- A. $5x-21$
- B. $-7x-21$
- C. $17x+21$
- D. $17x-21$

4. Simplify: $(5-.2) \div .6+1.4$

- A. 10.07
- B. 9.4
- C. 6.07
- D. 2.4

5. Simplify: $3(2x^2-5x+3)-(x^2-6x-4)$

- A. $3x^2+3x+21$
- B. $7x^2-21x+13$
- C. $5x^2-21x+5$
- D. $5x^2-9x+13$

6. Simplify: $(7.3x^3-x^2)+(0.5x^2-0.8x^3)$

- A. $8.1x^3-1.5x^2$
- B. $6.5x^3-0.5x^2$
- C. $6.5x^3+0.5x^2$
- D. $8.1x^3+1.5x^2$

7. Simplify: $\frac{4x+3}{5} - \frac{2x-3}{2}$

- A. $\frac{-2x-9}{10}$
- B. $\frac{2x+6}{3}$
- C. $\frac{2x-21}{10}$
- D. $\frac{-2x+21}{10}$

8. Simplify: $\frac{2}{3}(y^2-3y+4) + \frac{1}{3}(2y^2+6y+4)$

- A. $\frac{4}{3}y^2+4$
- B. $\frac{4}{3}y^2+3y+8$
- C. $\frac{7}{6}y^2+3y+8$
- D. $\frac{4}{3}y^2 + \frac{5}{3}y + \frac{16}{3}$

9. Simplify: $\frac{2x^2}{3} \cdot x \cdot \frac{4x^3}{5}$

- A. $\frac{8x^5}{15}$
- B. $\frac{8x^6}{15}$
- C. $\frac{5}{6x}$
- D. $\frac{2x^5}{5}$

10. Simplify: $(4x+3)(3x-4)$

- A. $12x^2+25x-12$
- B. $12x^2-7x-12$
- C. $12x^2-12$
- D. $5x-12$

11. Simplify: $(5k-3)^2$

- A. $25k^2+9$
- B. $10k-6$
- C. $25k^2-30k+9$
- D. $25k^2+30k+9$

12. Which of these is equivalent to $(-5x^2y^3)^3$?

- A. $-15x^5y^6$
- B. $-125x^6y^9$
- C. $-15x^6y^9$
- D. $-125x^6y^{27}$