

GRADUATION MATH COMPETENCY PRACTICE TEST

This test consists of 35 questions, administered in 30 minutes. It measures students' knowledge of operations with real numbers; operations with algebraic expressions; solution of equations and inequalities; and students' ability to apply algebraic operations and to interpret data.

Elementary Algebra Skills (35 questions, 30 minutes)

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| 1. Operations with real numbers | 9 questions |
| 2. Operations with algebraic expressions | 9 questions |
| 3. Solution of equations and inequalities | 8 questions |
| 4. Applications | 9 questions |

Sample Questions for Elementary Algebra Skills

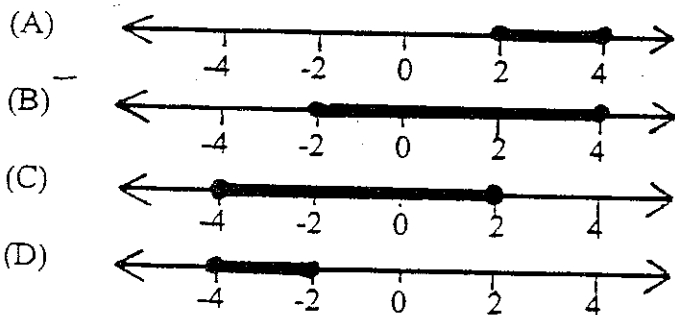
1. $3^0 + 3^2 =$

- (A) 6
- (B) 8
- (C) 9
- (D) 10

2. $(3t - 4)^2 =$

- (A) $9t^2 - 16$
- (B) $9t^2 + 16$
- (C) $9t^2 - 24t - 16$
- (D) $9t^2 - 24t + 16$

3. Which of the following is the graph of $-4 \leq x \leq 2$?



4. If Eric has x dimes and y nickels, which of the following represents the amount of money he has, in cents?

- (A) $5x + 10y$
- (B) $10x + 5y$
- (C) $(10 + 5)(x + 4)$
- (D) $50(x + y)$

DAILY NOON TEMPERATURE

Day	Noon Temperature (in degrees Fahrenheit)
Monday	52°
Tuesday	54°
Wednesday	53°
Thursday	x°

5. If the average (arithmetic mean) of the noon temperatures for the 4 days shown in the table above was 55°, what is the value of x ?

- (A) 55
- (B) 56
- (C) 57
- (D) 61

Elementary Algebra Answers:

- 1. D
 - 2. D
 - 3. C
 - 4. B
 - 5. D
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