

# Math Elimination

# *C* Learning Targets

- **1.** Explain why the process of elimination is more effective than searching for one correct answer.
- 2. Use strategies specific to a subject test to improve elimination skills.

# Elimination

# Instructions

Use Elimination strategies to answer the following question.

#### Elimination

To earn points on the Math test, you don't have to know the *right* way to solve a problem. You only have to know *a* way to solve the problem. Use trial and error strategies to help make eliminations:

- 1. Work backward. Use the rules of the problem to work backward from the solution and eliminate choices that don't work.
- **2.** Assume values. When variables trip you up, use made-up values to test and eliminate incorrect answer choices.

#### 1. If $3^x = 55$ , then which of the following must be true?

#### DO YOUR FIGURING HERE.

- **A.** 1 < x < 2
- **B.** 2 < x < 3
- C. 3 < x < 4
- **D.** 4 < x < 5
- **E.** x > 5

# Instructions

Use Elimination strategies to answer the following question.

60. The determinant of a matrix  $\begin{bmatrix} f & g \\ h & k \end{bmatrix}$  equals fk - gh. Which of the following is a value for x in the matrix  $\begin{bmatrix} x & x \\ x & 6 \end{bmatrix}$  so that the matrix has a determinant of 8?

**F.** −2 **G.** −1 **H.** 0 **J.** 1 **K.** 2

## DO YOUR FIGURING HERE.

## Instructions

Use Elimination strategies to answer the following question.

**56.** If *a* and *b* are real numbers such that a > 2 and b < -2, then which inequality must be true?

#### DO YOUR FIGURING HERE.

- **F.**  $\frac{a}{b} > 2$
- **G.** 2|a| > 2|b|
- **H.**  $a^2 < b^2$
- $J. \quad a^2 b < b^2 + a$
- **K.**  $\frac{a}{2} 2 > \frac{b}{2} 2$