

Test Prep: Multiple-Choice Questions

Strategy: Understand Distractors

Name _____ Date _____

The incorrect answer choices provided in multiple-choice questions may seem reasonable and can distract you from selecting the correct answer. These choices, called **distractors**, are often the results of common errors made when solving the problem.

To select the correct answer in a multiple-choice item, try using the following strategies:

- Underline important words.
- Restate the question.
- Apply appropriate rules, definitions, or properties.
- Analyze and eliminate answer choices.

Sample Test Item

Evaluate: $3 \cdot 2^2 - [-3 + (-7)]$
 $= 3(4) - (-10)$
 $= 12 + 10 = 22$

- A. 2** ← -10 was added instead of subtracted.
Eliminate this choice.
- (B.) 22** ← This is the correct choice!
- C. 26** ← The power was not evaluated first and -10 was added instead of subtracted. Eliminate this choice.
- D. 46** ← The power was not evaluated first.
Eliminate this choice.

Choose the correct answer. *TIP: Use any time you have left to check your answers.*

1. Simplify: $-\frac{4^{-2}8^2}{4^{2}8^{-8}}$

- A.** -2^{22} **C.** 2^{14}
B. -2^{14} **D.** 2^{22}

2. Evaluate: $2.6 + 4 \cdot \frac{2|-9|}{5} - 3^2$

- F.** -20.8 **H.** 8
G. -2.8 **J.** 26

3. Which number is irrational?

- A.** -8 **C.** $\frac{1}{4}$
B. 0 **D.** $\sqrt{10}$

4. What is the multiplicative inverse of -10 ?

- F.** $-\frac{1}{10}$ **H.** 1
G. $\frac{1}{10}$ **J.** 10

5. $A = \{4, 6, 7, 12, 20\}$; $B = \{-2, 6, 8, 12, 15\}$;
and $C = \{0, 3, 8, 12, 19\}$
What is $A \cap B \cap C$?

- A.** $\{12\}$
B. $\{6, 8, 12\}$
C. $\{-2, 0, 3, 4, 6, 7, 8, 12, 15, 19, 20\}$
D. \emptyset

6. What is the value of $\frac{3x^{-6}}{x^{-2}}$ if $x = -3$?

- F.** $-\frac{1}{9}$ **H.** $\frac{1}{27}$
G. $-\frac{1}{27}$ **J.** $\frac{1}{9}$

7. Which Property of Equality is illustrated by $x + y = y + x$?

- A.** Associative **C.** Distributive
B. Commutative **D.** Identity

8. What is the product of 7.5×10^4 and 5×10^3 ?

- F.** 3.75×10^7 **H.** 3.75×10^{12}
G. 3.75×10^8 **J.** 3.75×10^{13}