

SIERRA VISTA HIGH SCHOOL
MATHEMATICS DEPARTMENT

Nevada High School Mathematics
Practice Proficiency Exam
Mini-Test 8

1999
(10 Questions)

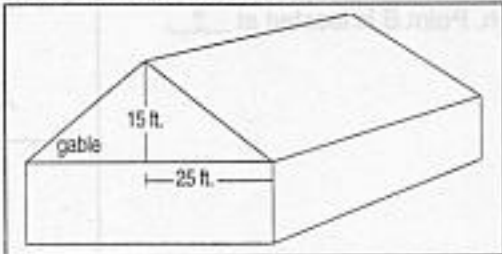


Practice Proficiency #8

Numbers and Operations

- Which mathematical statement best describes the following situation?
Alan worked 44 hours last week. He earned \$6.00 per hour and time-and-a-half over 40 hours. How much did he earn (E) last week?
 - $6(44) = E$
 - $(6 + 1.5) \times 44 = E$
 - $6(40) + 1.5(6) = E$
 - $6(44) + 1.5(6) = E$
 - $6(40) + 1.5(4)(6) = E$
- Maria made punch for a party. The ratio of a can of concentrated juice to a can of water was one to three. How much water did she use with 4 cans of concentrated juice?
 - 12 cans
 - 8 cans
 - 6 cans
 - 4 cans
 - 3 cans

Measurement and Geometry

- A movie started at 6:15 p.m. and lasted 3 hours and 37 minutes. What time did it end?
 - 8:52 p.m.
 - 9:15 p.m.
 - 9:37 p.m.
 - 9:52 p.m.
 - 10:02 p.m.
 - Sandra needs to paint the front triangle gable section of her house. What is the approximate area of the gable section to be painted?
 - 15 sq. ft.
 - 65 sq. ft.
 - 80 sq. ft.
 - 187.5 sq. ft.
 - 375 sq. ft.
- 
- The diagram shows a 3D perspective of a house's front facade. The roof is a gable, which is a triangle. A vertical line from the peak of the gable to the base is labeled "15 ft.". A horizontal line across the base of the gable is labeled "25 ft.". The word "gable" is written in the space between the base of the triangle and the front wall of the house.

Data Analysis, Probability, and Statistics

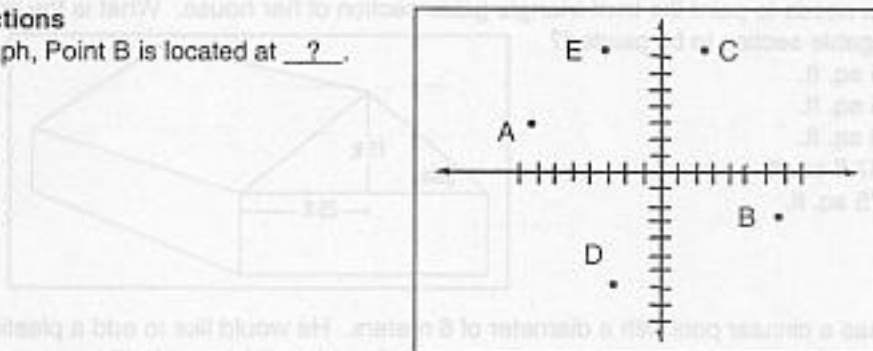
6. Using the numbers 1, 2, 3, 4, and 5, what is the probability of choosing an even number at random?
- A. $1/5$
B. $2/5$
C. $3/5$
D. $4/5$
E. $5/5$
7. What is the median of this data set? {13, 10, 15, 16, 21, 9, 16, 12, 10, 16}
- A. 16
B. 14
C. 13.8
D. 12
E. 10
8. How many different combinations of sundaes can you make using one flavor of ice cream and one topping with the options in the table below?

ice cream	toppings
vanilla	fudge
chocolate	cherry
	marshmallow

- A. 2 sundaes
B. 3 sundaes
C. 5 sundaes
D. 6 sundaes
E. 8 sundaes

Algebra and Functions

9. On the graph, Point B is located at ?
- A. (0, 7)
B. (3, 7)
C. (-3, 7)
D. (7, 3)
E. (7, -3)



10. Which expression is the result of simplifying the expression $(3a - 1) - (2a + 5)$?
- A. $a + 4$
B. $-a + 4$
C. $-a - 6$
D. $a - 6$
E. $5a + 4$