## Vendor: GED

# Exam Code: GED Mathematical Reasoning 

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## Version: 13.01

Q \& As: 299

## QUESTION 1

Marion County's total population of 184,026 , the number of people employed (including self employed) is 122,939 . The number of people employed is broken down by age group in the graph below.

> Marion County Employment by Age Group


Which of the following is closest to the number of employed people aged 45 to 54 who live in Marion County?
A. 21,273
B. 23,516
C. 26,144
D. 28,055
E. 29,891

Correct Answer: D

## QUESTION 2

Marion County's total population of 184,026, the number of people employed (including self employed) is 122,939 . The number of people employed is broken down by age group in the graph below.

Marion County Employment by Age Group


What is the DIFFERENCE, to the nearest thousand, between the number of employedpeople in Marion County in the 25-to-34 age group and the 55-and-over age group?
A. 11,000
B. 14,000
C. 26,000
D. 37,000
E. 48,000

Correct Answer: C

## QUESTION 3

An octagonal lamp has 8 square glass sides. The total area of the glass used for the lamp is given by the formula $g=8 x 2$, where $g$ is the area of the glass and $x$ is the length of one side of the squares. If the squares have sides whose length is 6 inches, what is the total area (in square inches) of the glass used to make the lamp?
A. 2340
B. 288
C. 96
D. 48
E. 8

Correct Answer: B

## QUESTION 4

A farmer built a barn at a cost of $\$ 48,000$ and wishes to insure it for the same amount. If insurance costs $\$ 0.35$ per $\$ 100$ of the amount insured, how much must the farmer pay for insurance?
A. $\$ 35.00$
B. $\$ 168.00$
C. $\$ 350.00$
D. $\$ 480.00$
E. $\$ 16,800.00$

## Correct Answer: B

## QUESTION 5

The committee responsible for making the arrangements for an upcoming conference can rent the following sizes of tables.

## Conference Tables

| Size of <br> Table | Number of Persons <br> Seated | Cost Per <br> Table |
| :---: | :---: | :---: |
| Small | 6 | $\$ 12$ |
| Medium | 12 | $\$ 16$ |
| Large | 18 | $\$ 20$ |

There are 600 people registered for the conference. All of the following combinations of tables will allow all those registered to be seated. Which will allow them to be seated at the LEAST cost?
A. 33 large tables and 1 small table
B. 30 large tables and 5 medium tables
C. 30 medium tables and 40 small tables
D. 50 medium tables
E. 100 small tables

Correct Answer: A

## QUESTION 6

If $x=-3$ and $y=4$, which of the following is the value of the expression $2 x y 2+x 2$ ?
A. -105
B. -87
C. -54
D. -42
E. -39

Correct Answer: B

## QUESTION 7

The length of a diagonal of a square is found using the formula $d=s ? 2$, where $d$ is the length of the diagonal, and $s$ is the measure of a side of the square. What is the distance, rounded to the nearest whole foot, from home plate to second base ona baseball diamond?

A. 90
B. 98
C. 116
D. 127

