

1. Of the following, which is greater than $\frac{1}{2}$?

Indicate ALL such fractions.

- A. $\frac{2}{5}$
- B. $\frac{4}{7}$
- C. $\frac{4}{9}$
- D. $\frac{5}{11}$
- E. $\frac{6}{13}$
- F. $\frac{8}{15}$
- G. $\frac{9}{17}$

2. If an object travels at five feet per second, how many feet does it travel in one hour?

- A. 30
- B. 300
- C. 720
- D. 1800
- E. 18000

3. What is the average (arithmetic mean) of all the multiples of ten from 10 to 190 inclusive?

- A. 90
- B. 95
- C. 100
- D. 105
- E. 110

4. A cubical block of metal weighs 6 pounds. How much will another cube of the same metal weigh if its sides are twice as long?

- A. 48
- B. 32
- C. 24
- D. 18
- E. 12

5. In a class of 78 students 41 are taking French, 22 are taking German. Of the students taking French or German, 9 are taking both courses. How many students are not enrolled in either course?

- A. 6
- B. 15
- C. 24

- D. 33
- E. 54

6. A straight fence is to be constructed from posts 6 inches wide and separated by lengths of chain 5 feet long. If a certain fence begins and ends with a post, which of the following could be the length of the fence in feet? (12 inches = 1 foot).

Indicate ALL such answers.

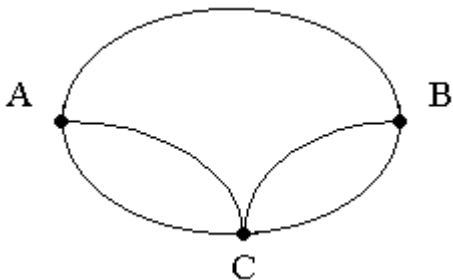
- A. 17
- B. 28
- C. 35
- D. 39
- E. 50

7. $(\sqrt{2} - \sqrt{3})^2 =$

- A. $5 - 2\sqrt{6}$
- B. $5 - \sqrt{6}$
- C. $1 - 2\sqrt{6}$
- D. $1 - \sqrt{2}$
- E. 1

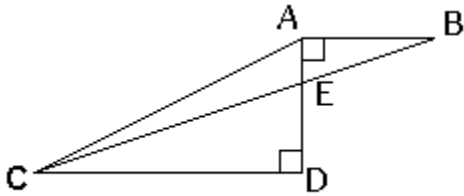
8. $230 + 230 + 230 + 230 =$

- A. 8120
- B. 830
- C. 232
- D. 230
- E. 226



9. Amy has to visit towns B and C in any order. The roads connecting these towns with her home are shown on the diagram. How many different routes can she take starting from A and returning to A, going through both B and C (but not more than once through each) and not travelling any road twice on the same trip?

- A. 10
- B. 8
- C. 6
- D. 4
- E. 2



10. In the figure above $AD = 4$, $AB = 3$ and $CD = 9$. What is the area of triangle AEC ?

- A. 18
- B. 13.5
- C. 9
- D. 4.5
- E. 3

Answer Key

1. BFG
2. E
3. C
4. A
5. C
6. ABDE
7. A
8. C
9. B
10. D