1. Of the following, which is greater than ½ ?

Indicate ALL such fractions.

- [ ] A. 2/5
- [ ] B. 4/7
- [ ] C. 4/9
- [ ] D. 5/11
- [ ] E. 6/13
- [ ] F. 8/15
- [ ] G. 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.

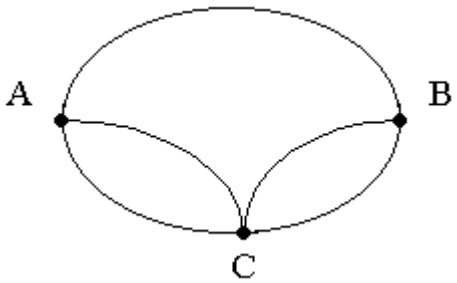
- A. 17
- B. 28
- C. 35
- D. 39
- E. 50

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

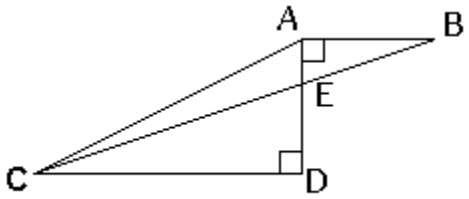
8. $230 + 230 + 230 + 230 =$

- 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