- 3. Lisa swims laps in the swimming pool. When she first started, she completed 12 laps in 30 minutes. Now she can finish 30 laps in 45minutes. By how many minutes has she improved her lap time?
- (A) 1
- (B) 2
- (C) 1/2
- (D) 2/3
- (E) 3

10. George's teacher asks him to plot all the ordered pairs (w, l) of positive integers for which w is the width and l is the length of a rectangle with area 36. What should his graph look like?

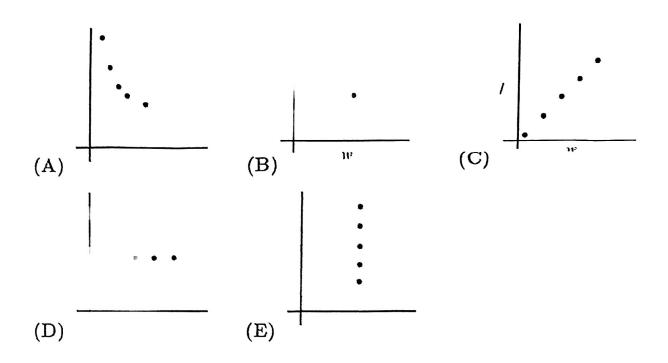
(A) A

(B) B

(C) C

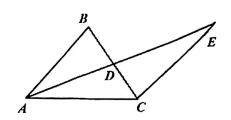
(D) D

(E) E



- 11. How many three-digit numbers have digits whose sum is a perfect cube?
- (A) 13
- (B) 26
- (C)36
- (D) 38
- (E) 39
- 12. Alex gets 90% on a 20-problem test, 95% on a 40-problem test and 96% on a 25-problem test. If the three tests are combined into one 85-problem test, which percent is closest to her overall score?
- (A) 20
- (B) 92
- (C) 93
- (D) 94
- (E) 95

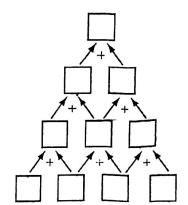
- 19. Point D is the midpoint of both BC and AE of triangles ACB and ACE, respectively. The area of ACB is 11 square units. Find the area of triangle CDE in square units.
- (A)4
- (B) 4.5
- (C) 5
- (D) 5.5
- (E) 6



22. Four different one-digit positive integers are placed in the bottom row of cells.

Numbers in adjacent cells are added and the sum is placed in the cell above them. In the second row, continue the same process to obtain a number in the top cell. What is the difference between the largest and smallest numbers possible in the top cell?

- (A) 36
 - (B) 24
- (C) 25
- (D) 48
- (E) 55



23. A box contains more than 1 and less than 1000 gold coins. If the coins are equally divided among six people, two coins are left over. If the coins are equally divided among seven people, three coins are left over. Find the sum of all possible number of coins in the box.

- (A) 11,500
- (B) 12,500
- (C) 2,000
- (D) 3,000
- (E) 15,000

24. In the multiplication Below, A, B, C, D and E are different digits. What is A + B?

- (A) 1
- (B) 3
- (C) 2
- (D) 4
- (E) 7

ABBA
× CDE

CDECDE

25. Barry wrote 6 different numbers less than 100, one on each side of 3 cards, and laid the cards on a table, as shown. The sums of the two numbers on each of the three cards are equal. The three numbers on the hidden sides are prime numbers. What is the greatest possible average of the two larger hidden prime numbers?

- (A) 63
- (B) 75
- (C) 55
- (D) 16
- (E) 47

