EMPLACE COLLEGE

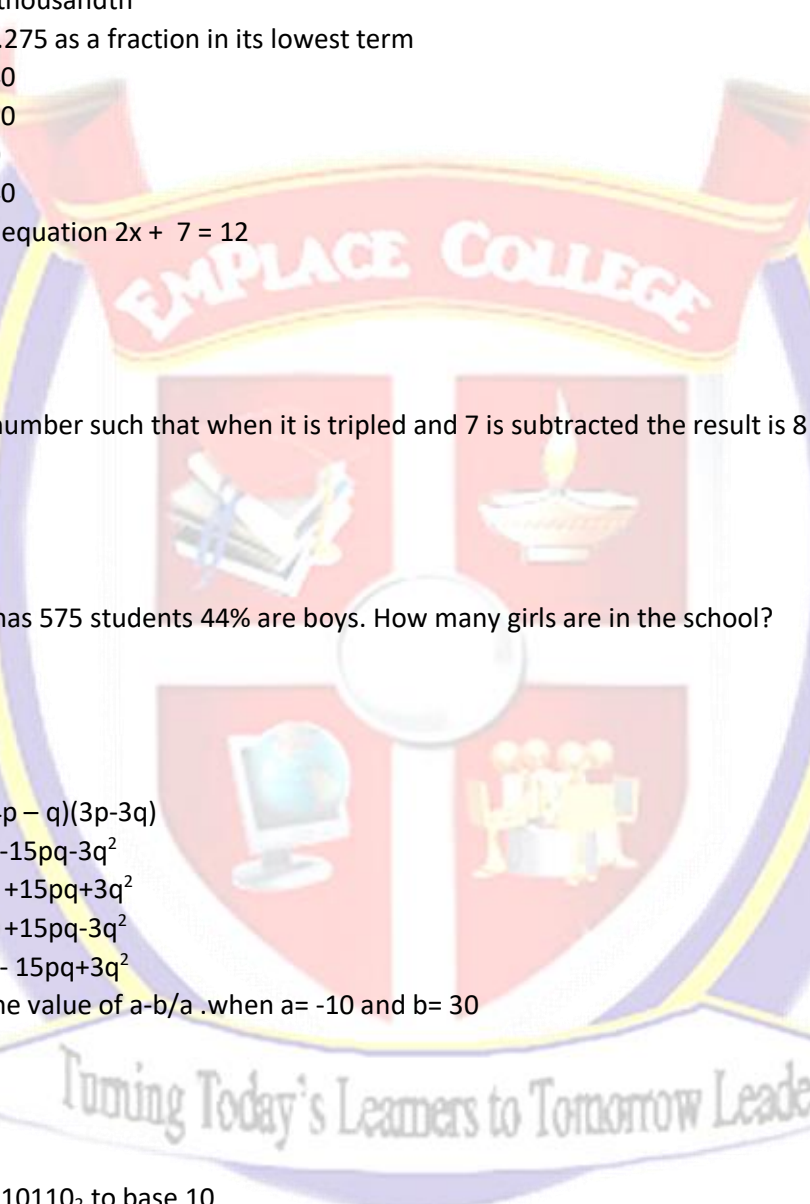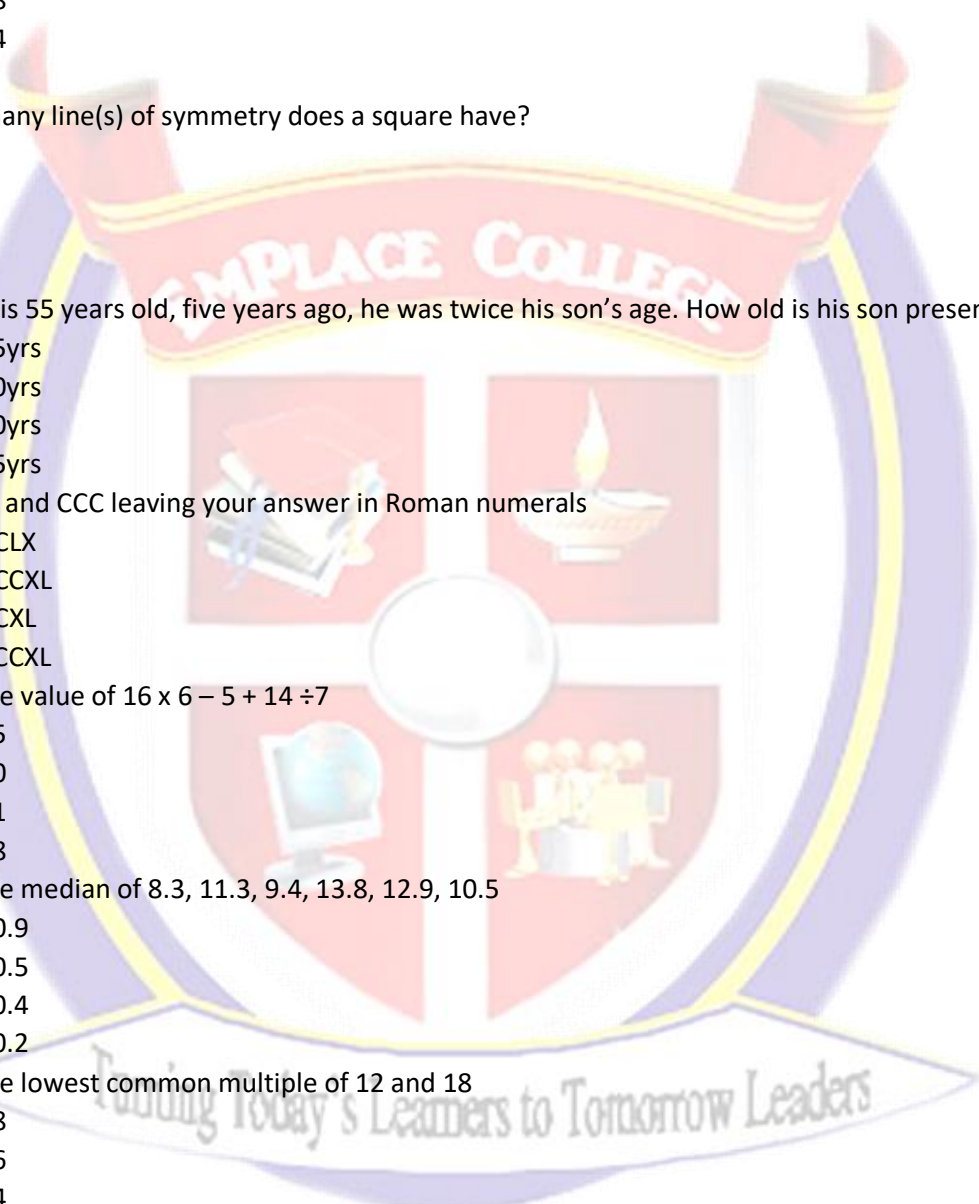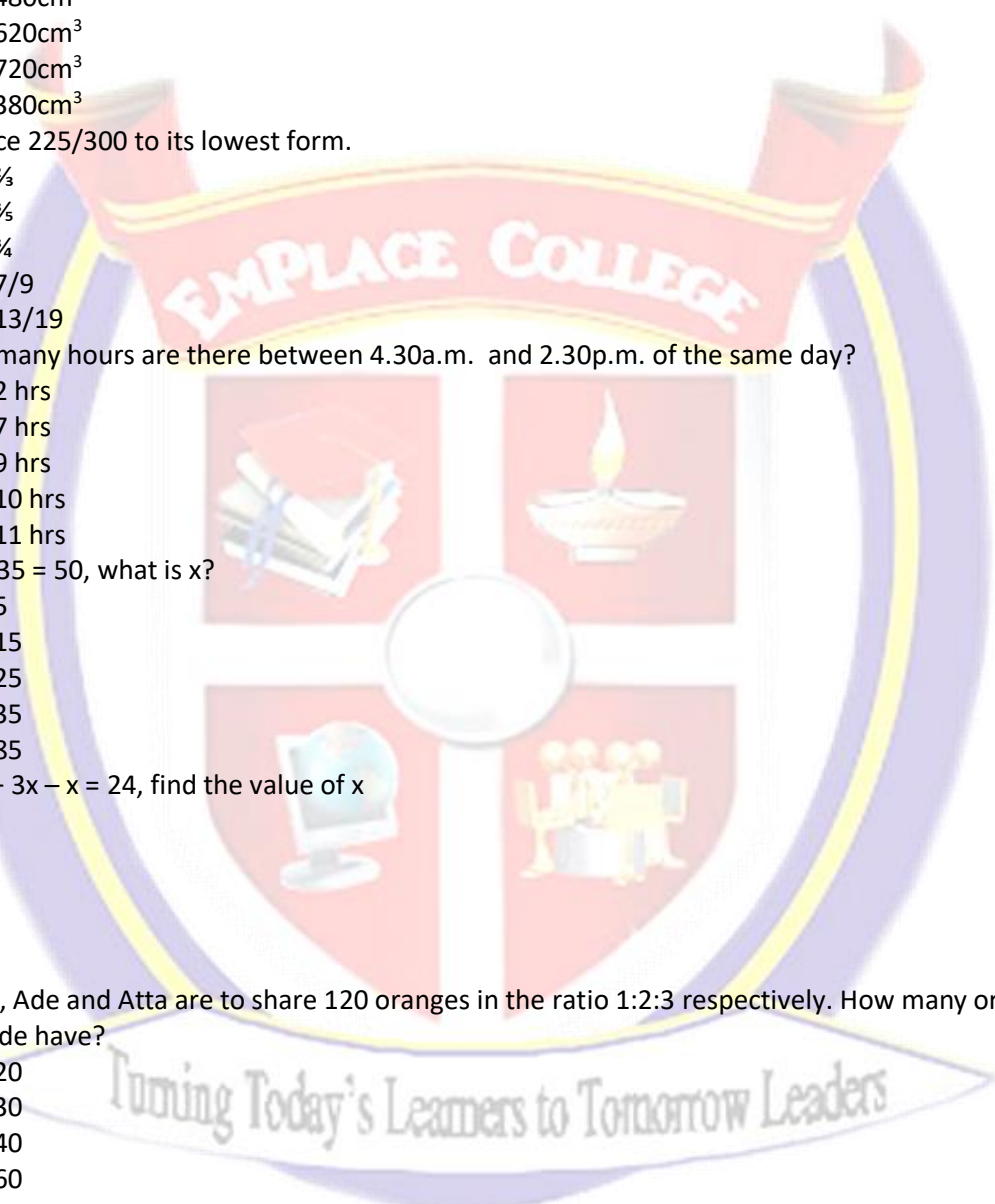**JSS1 Entrance Exam Practice Questions**

MATHEMATICS

1. The following table shows the number of chocolate cakes and strawberry cakes sold by Jason in a week. Each chocolate cake was sold for $3 and each strawberry cake was sold for $4. Complete the table by filling in the total number of pineapples and oranges sold.

Day	Number of chocolate cakes sold	Number of strawberry cake sold
Monday	13	10
Tuesday	17	20
Wednesday	10	19
Thursday	15	18
Friday	14	9
Total	21	25

   a) How many cakes did Jason sell altogether? Answer:_____
   b) On which day did he sell the greatest number of cakes? Answer:_____
   c) On which day did he collect the greatest amount of money from the sale of two types of cakes? Answer :_____
   d) How much money did he collect from the sales of cakes the whole week? Answer :_____

2. Inside a Lagos Santa's grotto the temperature is +19° C due to air conditioning. Outside, the temperature is +32° C. How much warmer is it outside Santa's grotto compared with inside?
   A.   15° C
   B.   14° C
   C.   12° C
   D.   13° C

3. Work out this division: 252 divided by 9
   A.   20
   B.   30
   C.   28
   D.   38

4. Express 0.00001208 in standard form.
   A. 12.08×10^{-6}
   B. 1.208×10^{-6}

C. 1.208×10^{-5}

D. 120.8×10^{-5}

5. Write the place value of 5 in the following the decimal fraction 487.05
   A. Tenth
   B. Hundredth
   C. Thousandth
   D. Ten thousandth

6. Express 0.275 as a fraction in its lowest term
   A. 16/40
   B. 11/30
   C. 7/30
   D. 11/40

7. Solve the equation 2x + 7 = 12
   A. 3
   B. 1
   C. 2.5
   D. 3.5

8. Find the number such that when it is tripled and 7 is subtracted the result is 8
   A. 5
   B. 2
   C. 4
   D. 3

9. A school has 575 students 44% are boys. How many girls are in the school?
   A. 332
   B. 322
   C. 350
   D. 320

10. Expand $(4p - q)(3p-3q)$
    A. $12p^2-15pq-3q^2$
    B. $12p^2 +15pq+3q^2$
    C. $12p^2 +15pq-3q^2$
    D. $12p^2- 15pq+3q^2$

11. What is the value of a-b/a .when a= -10 and b= 30
    A. 5
    B. 20
    C. 4
    D. 1.2

12. Convert 110110_2 to base 10
    A. 74_{10}
    B. 62_{10}
    C. 54_{10}
    D. 48_{10}

13. What is the positive difference between 7 and 15?
    A. +5

B. -8

C. +8

D. -4

14. Write down the next term of the sequence 4, 9, 14, 19, 24,_____
    A. 26
    B. 31
    C. 18
    D. 34

15. How many line(s) of symmetry does a square have?
    A. 1
    B. 2
    C. 4
    D. 3

16. A man is 55 years old, five years ago, he was twice his son's age. How old is his son presently?
    A. 55yrs
    B. 20yrs
    C. 30yrs
    D. 15yrs

17. Add XL and CCC leaving your answer in Roman numerals
    A. CCLX
    B. CCCXL
    C. CCXL
    D. XCCXL

18. Find the value of 16 x 6 – 5 + 14 ÷7
    A. 15
    B. 20
    C. 31
    D. 28

19. Find the median of 8.3, 11.3, 9.4, 13.8, 12.9, 10.5
    A. 10.9
    B. 10.5
    C. 10.4
    D. 10.2

20. Find the lowest common multiple of 12 and 18
    A. 18
    B. 36
    C. 24
    D. 4

21. If the bearing of A from B is 120^0. What is the bearing of B from A?
    A. 250^0
    B. 280^0
    C. 300^0
    D. 350^0

22. The product of two numbers is -21. If one of the number is 7, find the other number.

    A. -5

    B. -4

    C. -3

    D. -2

23. Calculate the volume of cuboid measuring 12cm by 10cm by 6cm

    A. $480cm^3$

    B. $620cm^3$

    C. $720cm^3$

    D. $380cm^3$

24. Reduce 225/300 to its lowest form.

    A. ⅔

    B. ⅗

    C. ¾

    D. 7/9

    E. 13/19

25. How many hours are there between 4.30a.m. and 2.30p.m. of the same day?

    A. 2 hrs

    B. 7 hrs

    C. 9 hrs

    D. 10 hrs

    E. 11 hrs

26. If x + 35 = 50, what is x?

    A. 5

    B. 15

    C. 25

    D. 35

    E. 85

27. If 6x + 3x – x = 24, find the value of x

    A. 24

    B. 9

    C. 8

    D. 3

    E. 2

28. Chike, Ade and Atta are to share 120 oranges in the ratio 1:2:3 respectively. How many oranges will Ade have?

    A. 20

    B. 30

    C. 40

    D. 60

    E. 80

29. A man's average speed is 56km/hr. how far will he travel in 45 minutes?

    A. 56km

    B. 42km

    C. 28

    D. 15km

    E. 11km

30. If a biro cost ₦2.50, how many biros wcan you buy with ₦285?

    A. 114
    B. 250
    C. 285
    D. 411
    E. 570

31. Subtract the sum of 3.75 and 2.0001 from 6.3009

    A. 0.5580
    B. 0.5508
    C. 0.5085
    D. 0.5058

32. Calculate the product of 38 and 18.

    A. 688
    B. 687
    C. 684
    D. 56
    E. 20

33. Calculate the perimeter of a square whose area is 225cm^2

    A. 3600cm
    B. 360cm
    C. 60cm
    D. 2225cm
    E. 240cm

34. Express 4003cm in metres.

    A. 0.403m
    B. 4.03m
    C. 40.03m
    D. 400.3m
    E. 40.3m

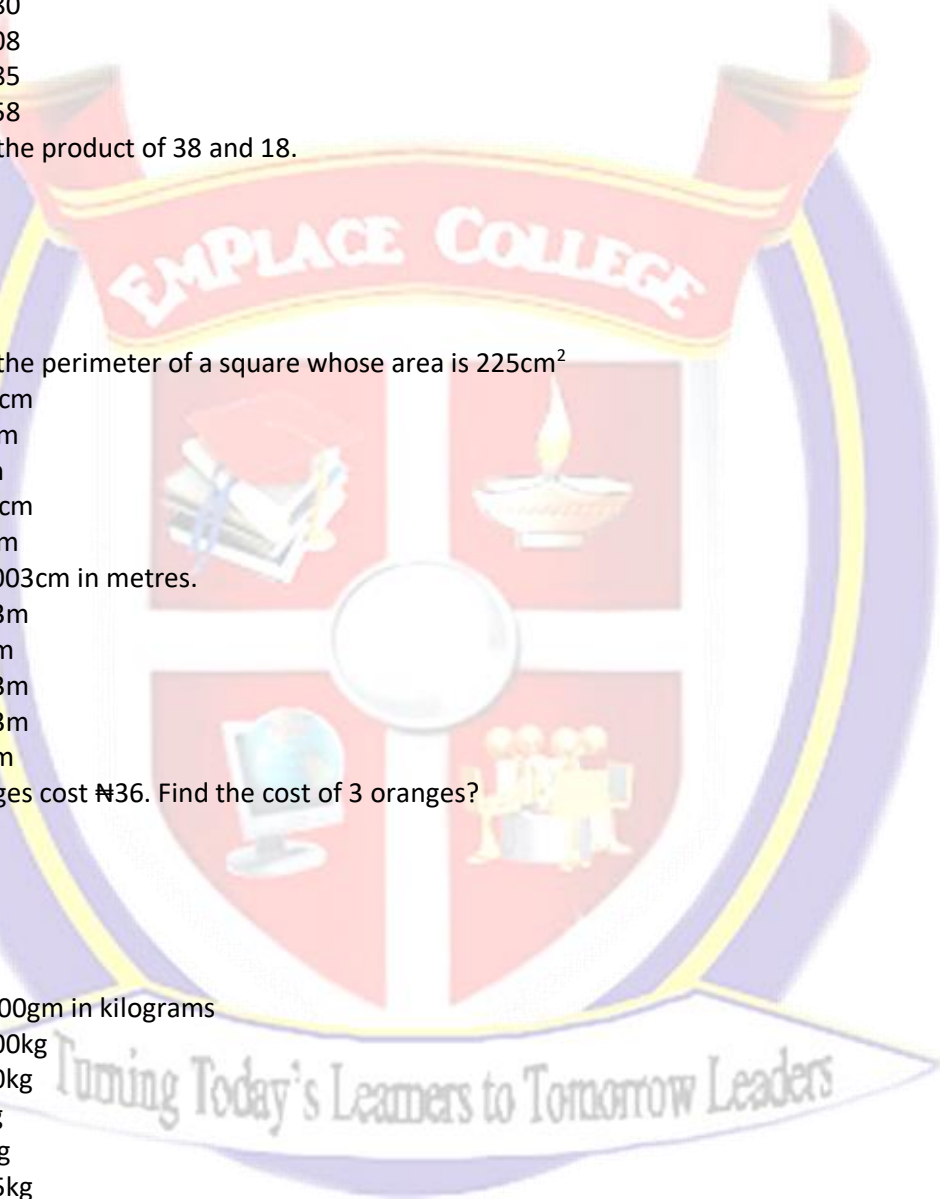**35.** If 54 oranges cost ₦36. Find the cost of 3 oranges?

    A. ₦2
    B. ₦12
    C. ₦18
    D. ₦33
    E. ₦51

36. Write 75000gm in kilograms

    A. 750.00kg
    B. 75.00kg
    C. 7.5kg
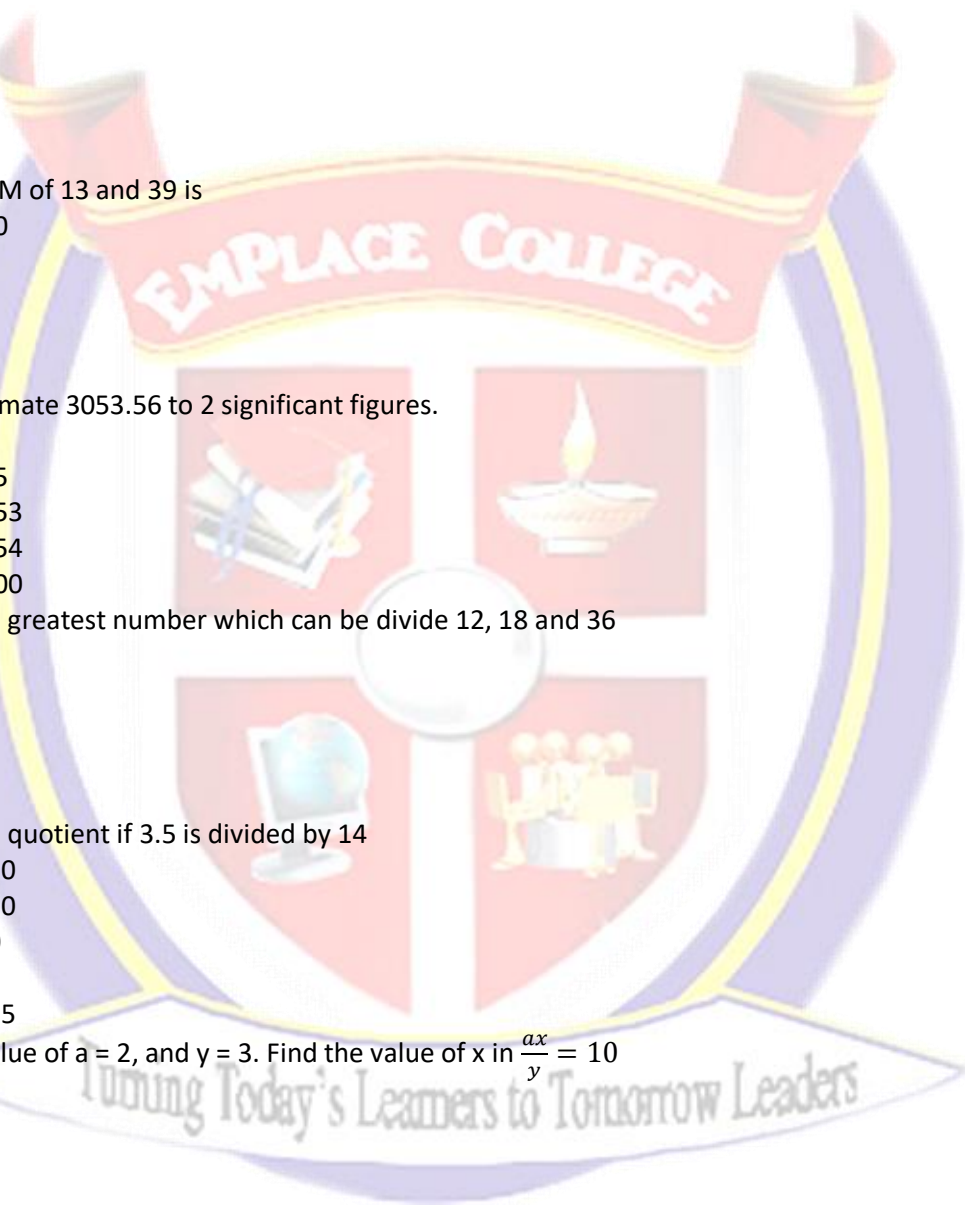   D. 075kg
    E. 0.075kg

37. Calculate the value of x in the equation $\frac{x}{4} = \frac{42}{4}$

    A. 16
    B. 42
    C. 50
    D. 168
    E. 165

38. Two numbers are in the ratio of 7:9. The larger number is 54. Find the smaller number.
- A. 84
- B. 81
- C. 63
- D. 42
- E. 16

39. The L.C.M of 12,8, and 4 divided by their H.C.F is
- A. 96
- B. 28
- C. 24
- D. 6
- E. 4

40. The L.C.M of 13 and 39 is
- A. 390
- B. 52
- C. 39
- D. 13
- E. 26

41. Approximate 3053.56 to 2 significant figures.
- A. 31
- B. 305
- C. 3053
- D. 3054
- E. 3100

42. Find the greatest number which can be divide 12, 18 and 36
- A. 66
- B. 36
- C. 18
- D. 9
- E. 6

43. Find the quotient if 3.5 is divided by 14
- A. 40.0
- B. 25.0
- C. 4.0
- D. 2.5
- E. 0.25

44. If the value of a = 2, and y = 3. Find the value of x in $\frac{ax}{y} = 10$
- A. 2
- B. 15
- C. 30
- D. 50
- E. 60

45. In a class there are 15 girls and 35 boys. What is the ratio of girls to boys?
- A. 3:7
- B. 7:3
- C. 15:35
- D. 35:15

E. 50:35

46. If 5x = 25, what is the value of $2x^2$
   A. 5
   B. 10
   C. 20
   D. 50
   E. 100

47. If a = 5 and b = 3, what is the value of 2a – 3b + 3a
   A. -16
   B. -14
   C. 14
   D. 16
   E. 34

48. Which of the numbers is the highest in value ?
   A. 0
   B. -1
   C. -2
   D. -5
   E. -100

49. Write 64 in Roman Numerals:
   A. LXIV
   B. XLIV
   C. VLIX
   D. DLIV

50. Write the following in Arabic Numerals CCCLXXX
   A. 258
   B. 280
   C. 38
   D. 428