touch each other, knowing that the area of a circle is equal to 3-1416 square of radius, and area of equilateral triangle= 433 square of side.

XVII.

1 What number must be added to or subtracted from the product of the sum and difference of 11 and 14, so that it will contain 13 evenly?

2. How many times greater is the L. C. M. of **4**, 6 and 8 than the H. C. F. of $\frac{1}{2}$ and $\frac{2}{3}$?

3. The L. C. M. of two numbers is 63 and their G. C. M. is 3; one of the numbers is 9 : find the other?

4. A grocer bought 100 geese and turkeys for $65; for the geese he paid 30 cts each and for the turkeys 80 each : find the number of each kind.

5. A father dying leaves his estate to his two sons, ages **19** and **20** respectively, to be divided so that each shall have equal amounts at maturity. In what proportion should it be divided, interest at **5** per cent per annum? *(a)* Simple Interest. *(b)* Compound Interest.

6. A man wishing to sell a horse asks 20 per cent. more than it cost; he finally sold it for 25 per cent. less than his asking price and lost $15 on cost: what was his asking price?

7. What should be the Policy of Insurance at 5 per cent. on a diamond necklace worth $380, so that if lost the owner shall recover the premium and value of the necklace?

8. If the true discount off a note of $420 for a certain