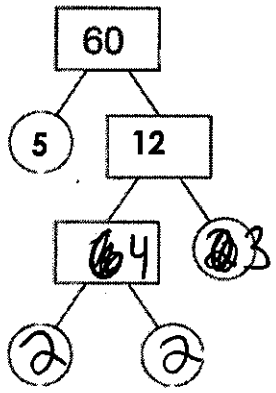
Name:_____ Date:_____

Prime Factor Trees

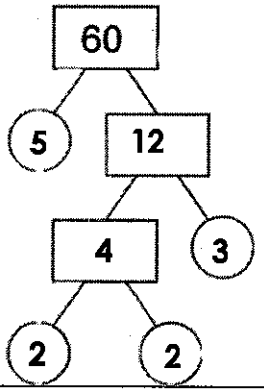
The most common prime numbers used when breaking down a larger number are

2, 3, 5

Check your original number to see if it can be divided by one of the numbers listed above



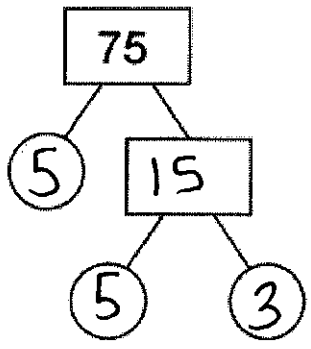
Keep breaking down every number into primes until there are no more multiples (primes) left to divide into.



Now you can rewrite your original number as **a multiple of its primes**. Meaning you can multiply all of the prime numbers together to get your original number

60 = 2 x 2 x 3 x 5

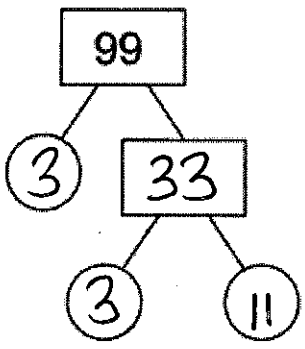
1)



Prime Factors

3 x 5 x 5 = 75

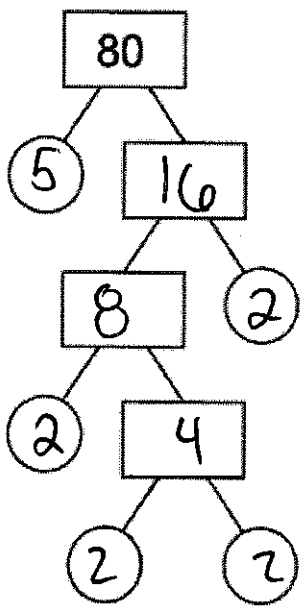
2)



Prime Factors

3 x 3 x 11 = 99

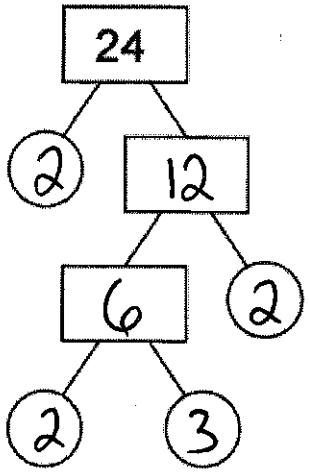
3)



Prime Factors

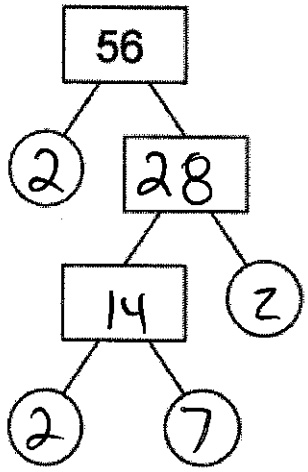
2 x 2 x 2 x 2 x 5 = 80

4)



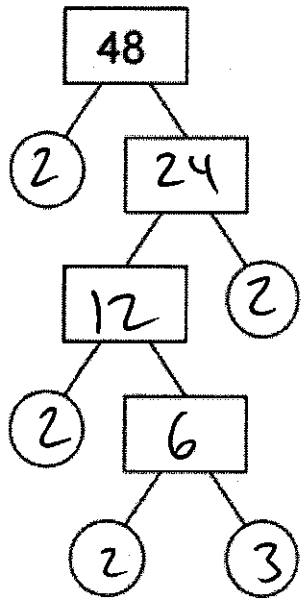
Prime Factors
2 x 2 x 2 x 3 = 24

5)



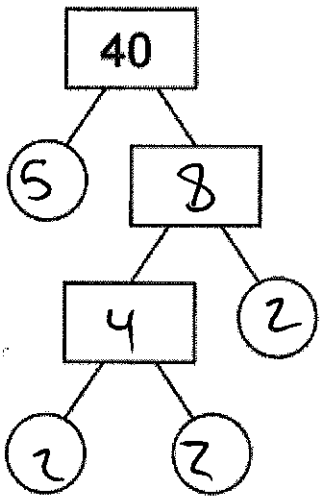
Prime Factors
2 x 2 x 2 x 7 = 56

6)



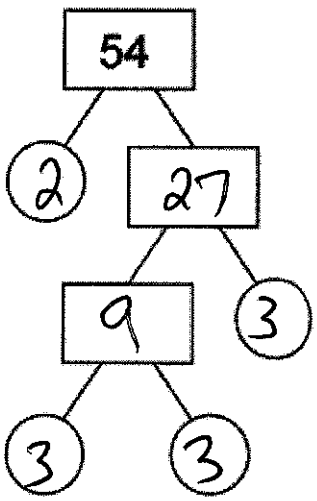
Prime Factors
2 x 2 x 2 x 2 x 3 = 48

7)



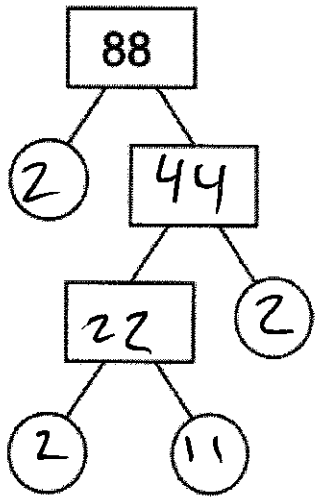
Prime Factors
2 x 2 x 2 x 5 = 40

8)



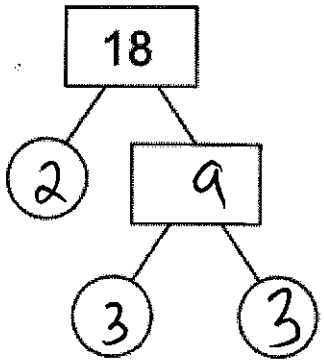
Prime Factors
2 x 3 x 3 x 3 = 54

9)



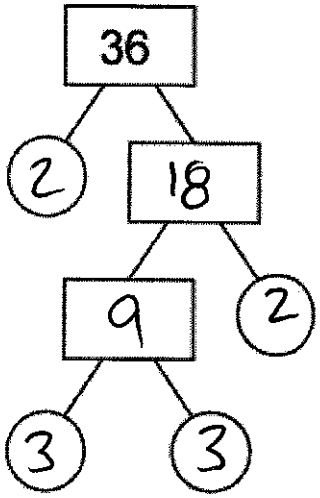
Prime Factors
2 x 2 x 2 x 11 = 88

10)



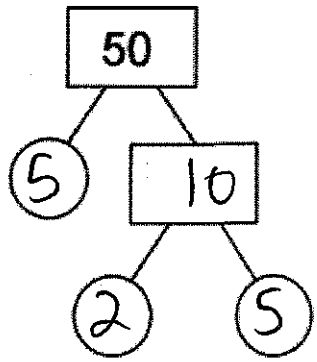
Prime Factors
2 x 3 x 3 = 18

11)



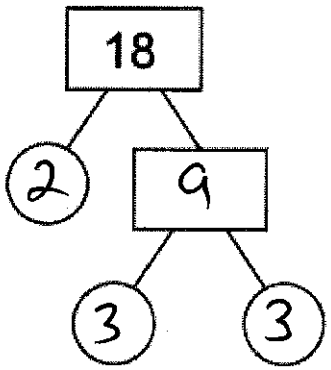
Prime Factors
2 x 2 x 3 x 3 = 36

12)



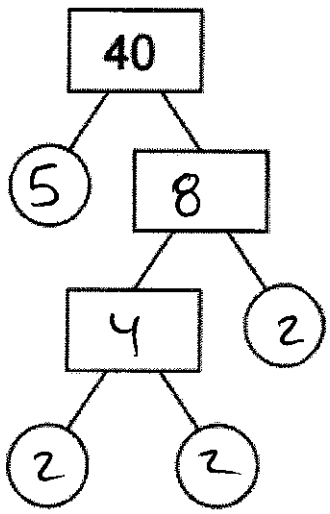
Prime Factors
2 x 5 x 5 = 50

13)



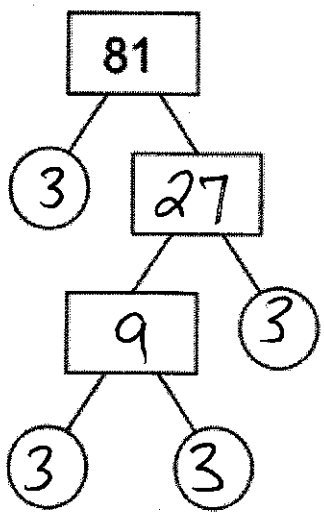
Prime Factors
2 x 3 x 3 = 18

14)



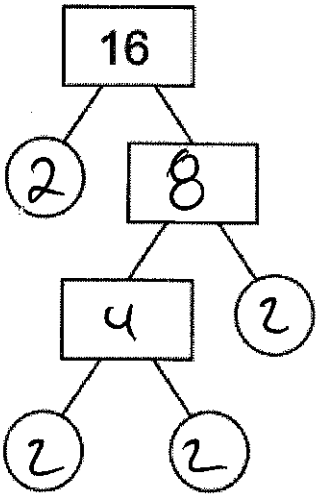
Prime Factors
2 x 2 x 2 x 5 = 40

15)



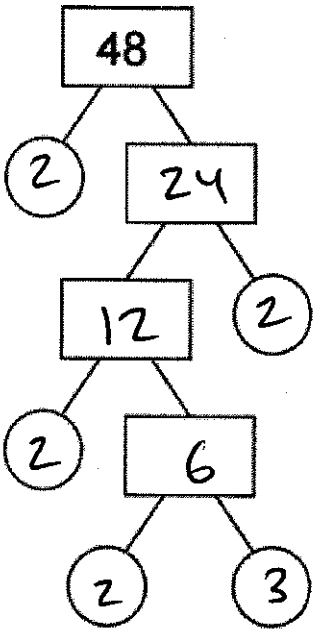
Prime Factors
3 x 3 x 3 x 3 = 81

16)



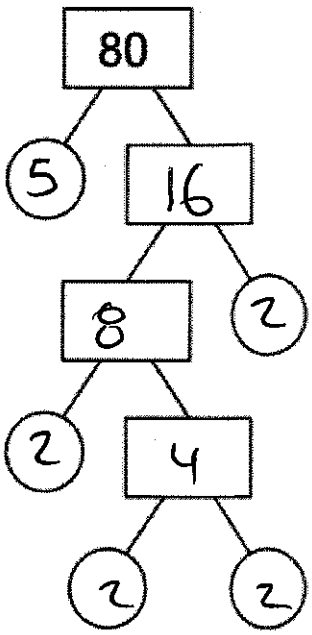
Prime Factors
2 x 2 x 2 x 2 = 16

17)



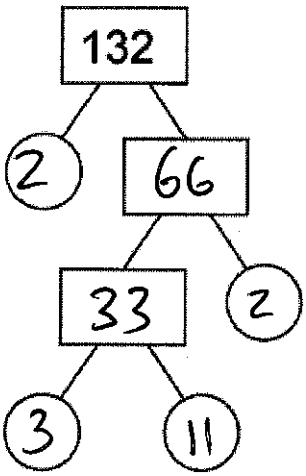
Prime Factors
2 x 2 x 2 x 2 x 3 = 48

18)



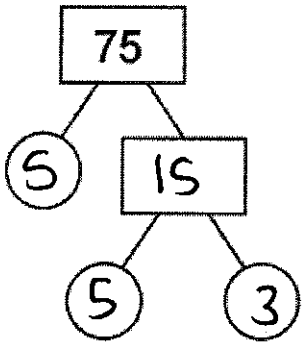
Prime Factors
2 x 2 x 2x2 x 5= 80

19)



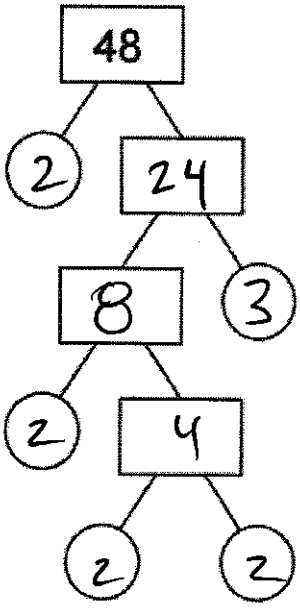
Prime Factors
2 x2 x 3 x 11 = 132

20)



Prime Factors
3 x 5 x 5 = 75

21)



Prime Factors
2 x 2 x 2 x 2 x 3 = 48