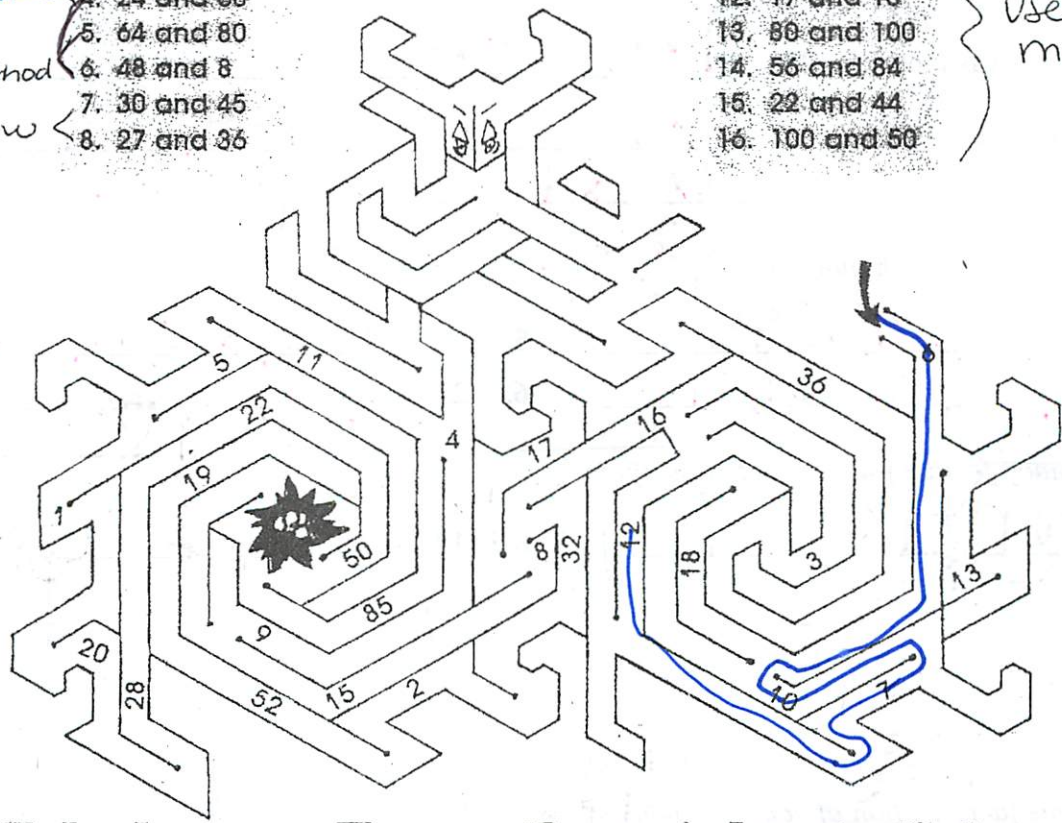


FIND THE G.C.F

- list
- 18 and 24
 - 20 and 30
 - 21 and 28
 - 24 and 60
 - 64 and 80
 - 48 and 8
 - 30 and 45
 - 27 and 36
- factor tree
ladder method
rainbow

- 8, 12, 16
- 22, 44, 88
- 66 and 20
- 17 and 15
- 80 and 100
- 56 and 84
- 22 and 44
- 100 and 50

Use any method

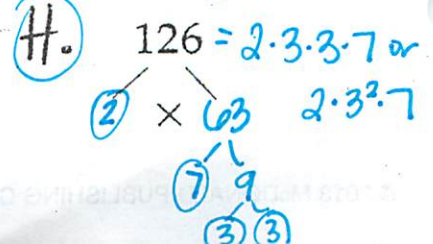
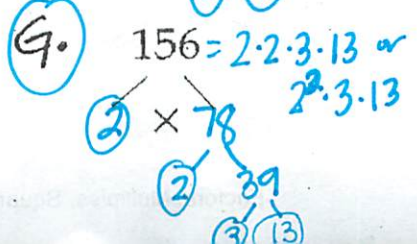
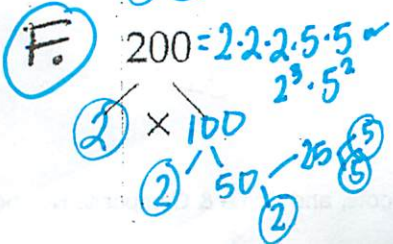
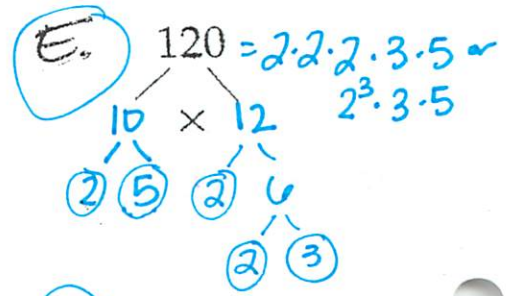
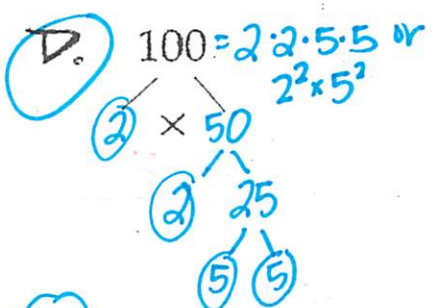
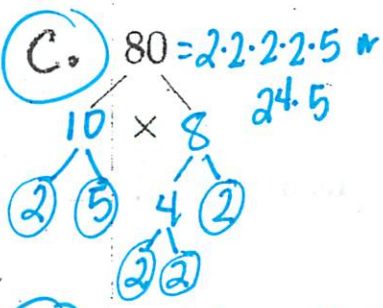
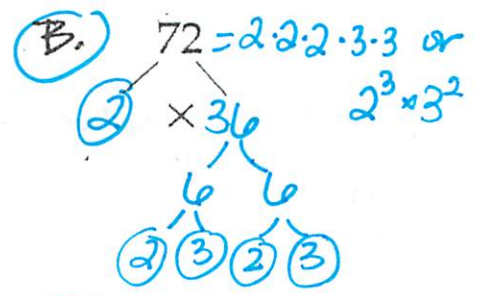
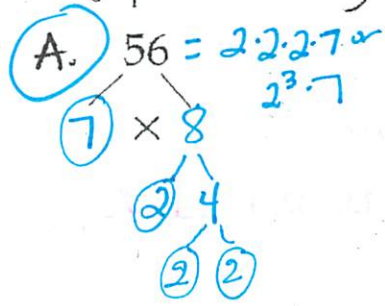
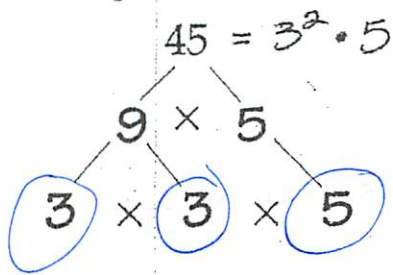


$$\begin{array}{r} \sqrt{60} \\ 4 \downarrow \\ \underline{40} \\ 20 \end{array}$$

PRIME FACTOR TREES

Find the prime factors for each composite number by completing a factor tree. The first factor tree has been done for you. Then, express each number as a product of primes using exponents.

Example:



Name _____

Factors

1. List all the ways to factor 15.

$1 \times 15, 5 \times 3$

2. List all the ways to factor 16.

$1 \times 16, 2 \times 8, 4 \times 4, 2 \times 2 \times 4, 2 \times 2 \times 2 \times 2, 2^2 \times 4, 2^4$

List all the factors for each number.

3. 45 1, 3, 5, 9, 15, 45

5. 32 1, 2, 4, 8, 16, 32

4. 81 1, 3, 9, 27, 81

6. 21 1, 3, 7, 21

Find the common factors for each set of numbers.

7. 14, 21 1, 7

8. 18, 24, 48 1, 2, 3, 6

Write the prime factorization of each number.

9. 56 $2^3 \times 7$

10. 40 $2^3 \times 5$

Find the GCF for each set of numbers.

11. 5, 15 5

13. 32, 48 16

15. 40, 60, 80 20

$$\begin{array}{r|l} 5 & 5 \mid 15 \\ & 1 \mid 3 \end{array}$$

$$\begin{array}{r|ll} 16 & 32 & 48 \\ & 2 & 3 \end{array}$$

12. 7, 30 1

14. 15, 25, 75 5

16. 64, 144 16

$$\begin{array}{r|ll} 8 & 64 & 144 \\ 2 & 8 & 18 \\ & 4 & 9 \end{array}$$