Finding LCM and GCF
With Prime Factorization

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Math6
Period _G_

My numbers: __18 , 30__

Find Prime Factorization? 🌲 🌲 ⬤

My common prime factors are:

__2,3__

18

2 9

3 3

2·3·3

30 →

2·3·5

18   common prime factors   30

3   2 3   5   LCM

unique prime factors   unique prime factors
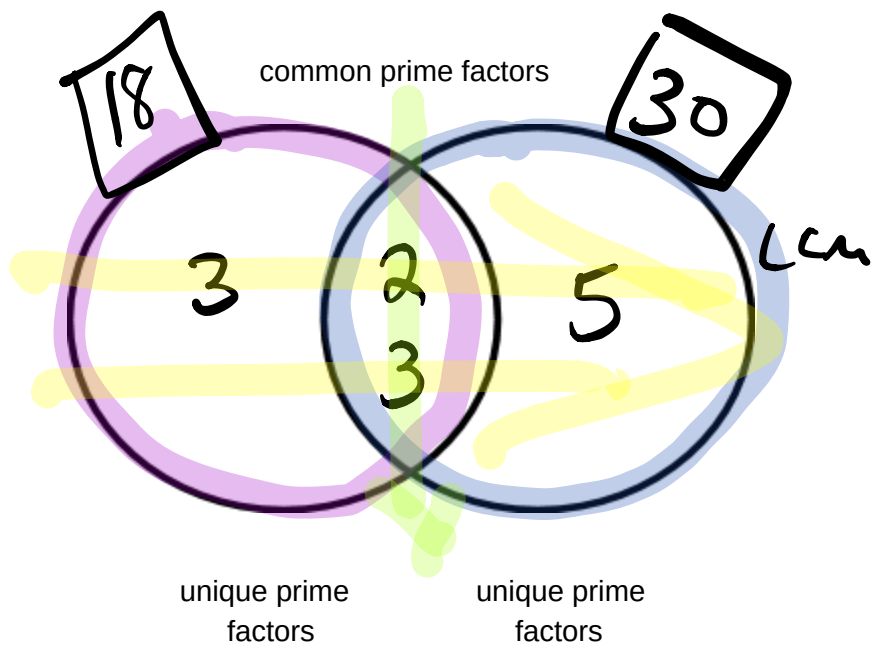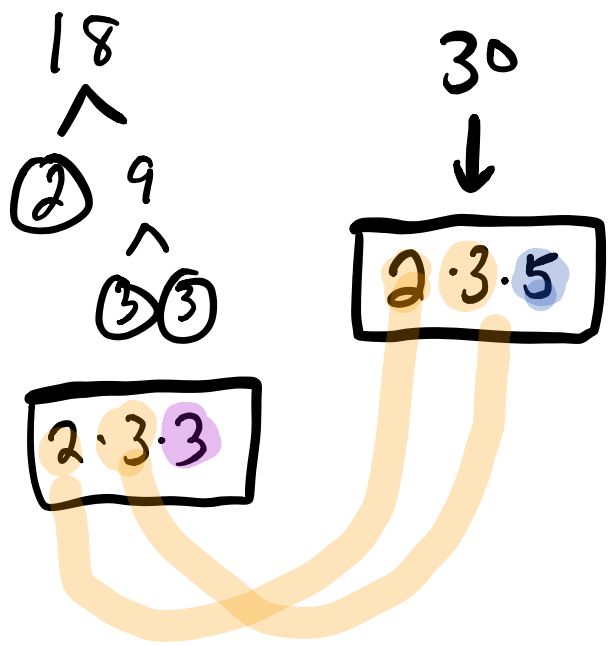
LCM = product of ALL Prime Factors
(in the Venn diagram)

= __3·2·3·5 = 90__

GCF = product of ONLY the Common Prime Factors

= __2·3 = 6__

My numbers: **4, 21**

Find Prime Factorization? 🌲🌲

My common prime factors are:

none

4
```
  4
 ⟨⟩
②  ②
```

21
```
  21
 ⟨⟩
③  ⑦
```

| 2·2 | 3·7 |

RELATIVELY

PRIME

common prime factors

| 4 | | 21 |

2
2

3
7

×
LCM

unique prime factors   unique prime factors
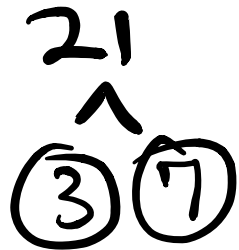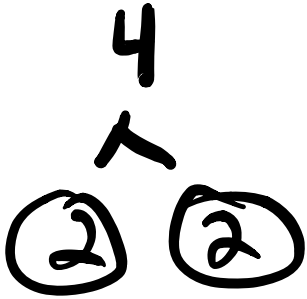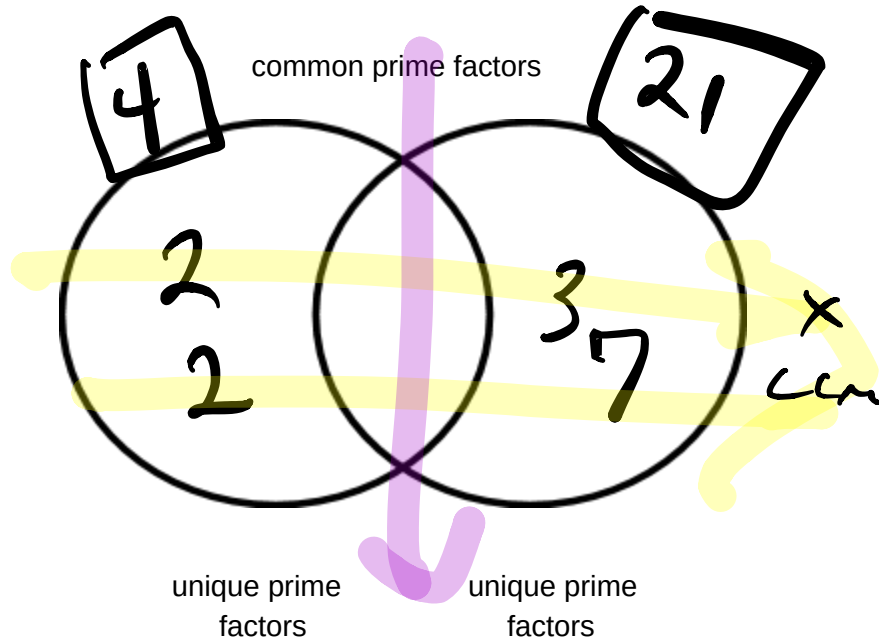
LCM = product of ALL Prime Factors
(in the Venn diagram)

= $\underline{2·2·3·7 = \boxed{84}}$

GCF = product of ONLY the Common Prime Factors

= $\underline{1}$ relatively prime.