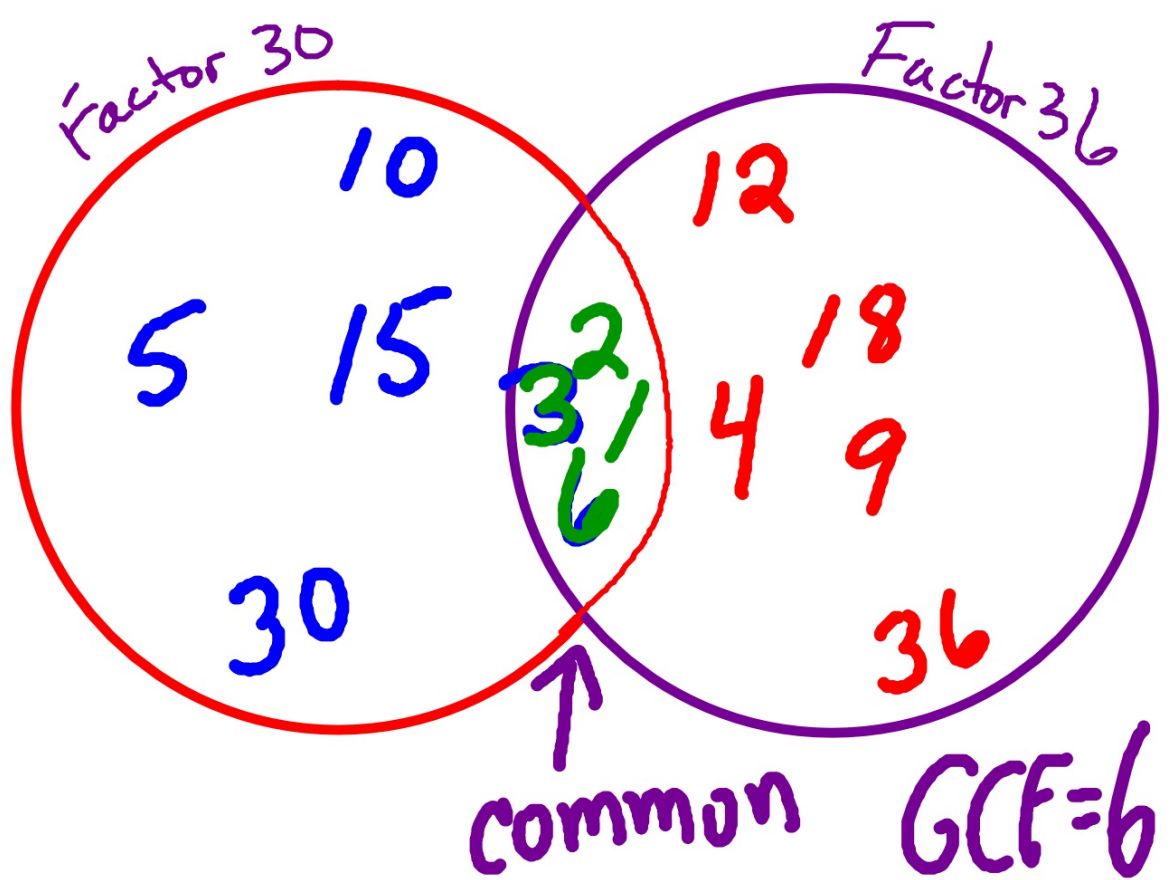
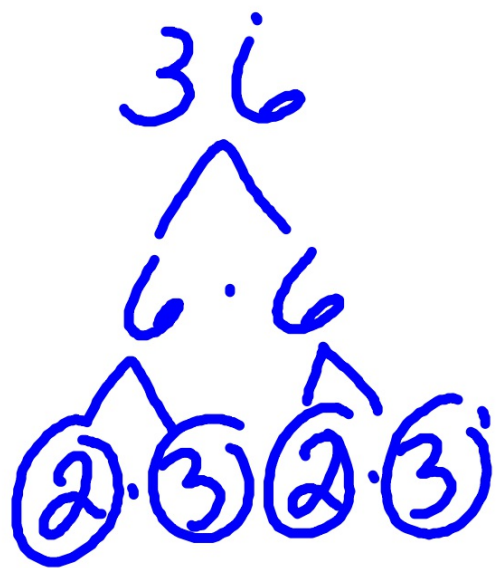
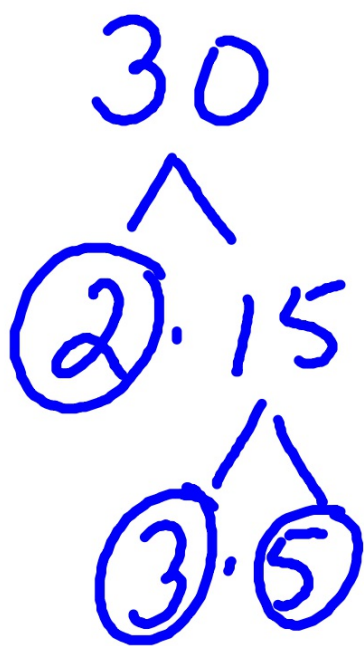


55
65

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Venn Diagram
Prime Factorization
Make a List
Upside down Division





$30 = 2 \cdot 3 \cdot 5$

$36 = 2 \cdot 2 \cdot 3 \cdot 3$

$2 \cdot 3 = 6 \text{ GCF}$

Prime factorizations of 30 and 36 are shown. Red arrows point from the first 2 in the 30 factorization and the first 2 in the 36 factorization to the first 2 in the GCF calculation. Another red arrow points from the first 3 in the 30 factorization and the first 3 in the 36 factorization to the 3 in the GCF calculation.

$$30 = 1, 2, 3, 5, 6, 10, 15, 30$$

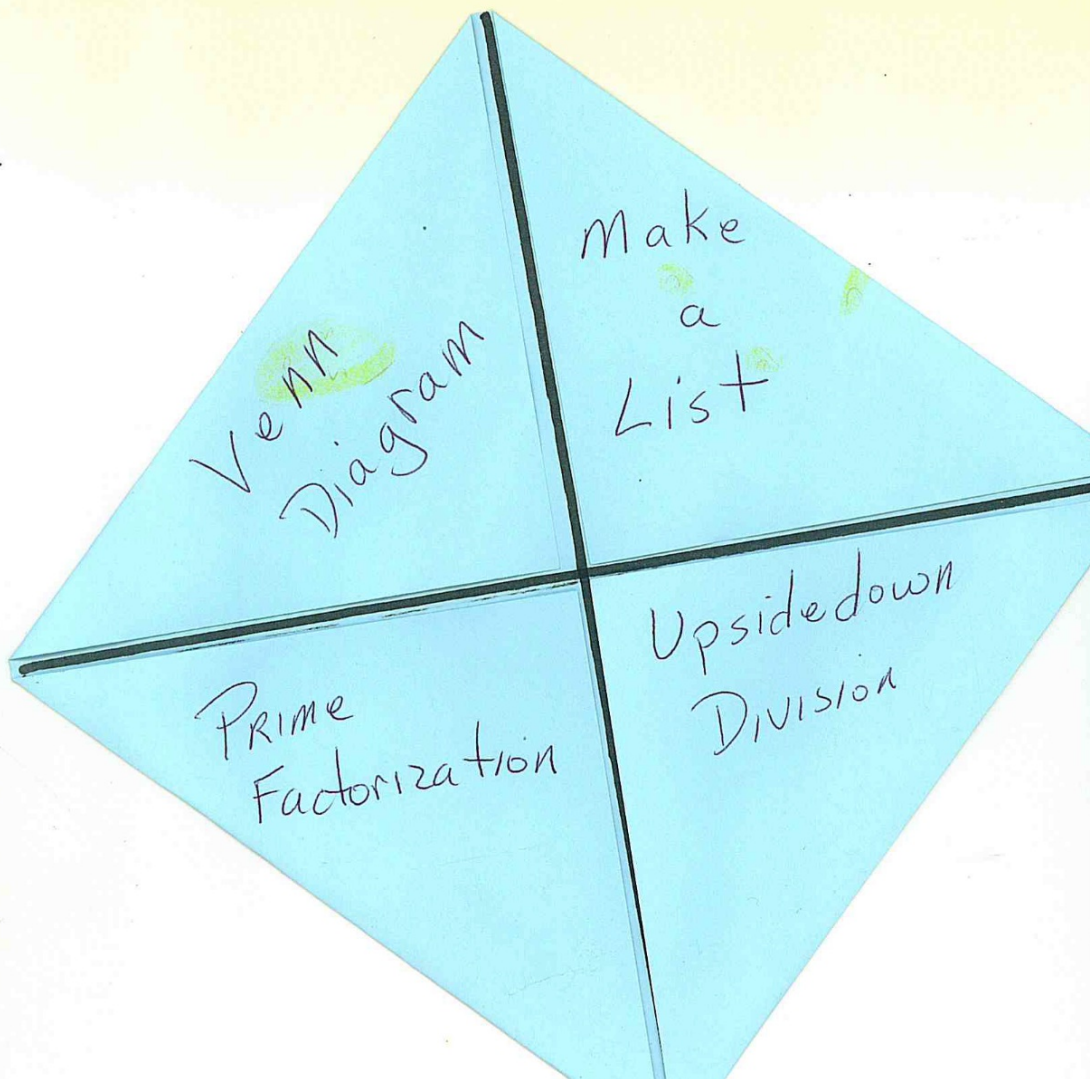
$$36 = 1, 2, 3, 4, 6, 9, 12, 18, 36$$

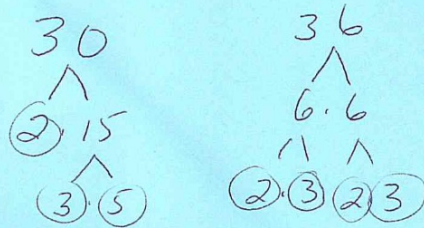
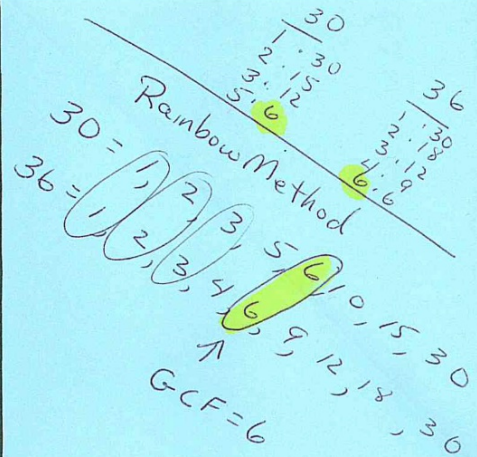
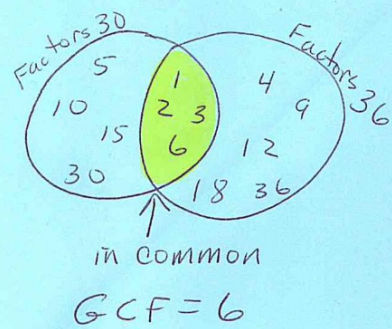
$$\text{GCF} = 6$$

30	36
1 · 30	1 · 36
2 · 15	2 · 18
3 · 10	3 · 12
5 · 6	4 · 9
	6 · 6

$2 \cdot 3 = 6$
GCF

2	30	36
3	15	18
	5	6

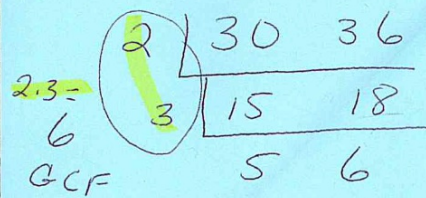




30 = 2 · 3 · 5

36 = 2 · 2 · 3 · 3

GCF = 2 · 3 = 6



20

Factors

* The numbers you use to get a product.

* A whole number that divides a whole number without a remainder.

NOT
PRIME
OR
COMPOSITE

1	2	3	4	5	6	7	8	9	10
1x1	1x2	1x3	1x4 2x2	1x5	1x6 2x3	1x7	1x8 2x4	1x9 3x3	1x10 2x5

11	12	13	14	15	16	17	18	19	20
1x11	1x12 2x6 3x4	1x13	1x14 2x7	1x15 3x5	1x16 2x8 4x4	1x17	1x18 2x9 3x6	1x19	1x20 2x10 4x5

21	22	23	24	25	26	27	28	29	30
1x21 3x7	1x22 2x11	1x23	1x24 2x12 3x8 4x6	1x25 5x5	1x26 2x13	1x27 3x9	1x28 2x14 4x7	1x29	1x30 2x15 3x10 5x6

31	32	33	34	35	36	37	38	39	40
1x31	1x32 2x16 4x8	1x33 3x11	1x34 2x17	1x35 5x7	1x36 2x18 3x12 4x9 6x6	1x37	1x38 2x19	1x39 3x13	1x40 2x20 4x10 5x8

41	42	43	44	45	46	47	48	49	50
1x41	1x42 2x21 3x14 6x7	1x43	1x44 2x22 4x11	1x45 3x15 5x9	1x46 2x23	1x47	1x48 2x24 3x16 4x12 6x8	1x49 7x7	1x50 2x25 5x10

51	52	53	54	55	56	57	58	59	60
1x51 3x17	1x52 2x26 4x13	1x53	1x54 2x27 3x18 6x9	1x55 5x11	1x56 2x28 4x14 7x8	1x57 3x19	1x58 2x29	1x59	1x60 2x30 3x20 4x15 5x12 6x10

Factor
x Factor
Product

Fix this. There should be a 6 X 6 as another factor of 36.

ect.

* Finish the list of Factors

le

* ~~Finite~~ (opposite of infinite)

* Few Factors

61	62	63	64	65	66	67	68	69	70
1 x 61	1 x 62 2 x 31	1 x 63 3 x 21 7 x 9	1 x 64 2 x 32 4 x 16 8 x 8	1 x 65 5 x 13	1 x 66 2 x 33 3 x 22 6 x 11	1 x 67	1 x 68 2 x 34 4 x 17	1 x 69 3 x 23	1 x 70 2 x 35 5 x 14 7 x 10

71	72	73	74	75	76	77	78	79	80
1 x 71	1 x 72 2 x 36 3 x 24 4 x 18 6 x 12 8 x 9	1 x 73	1 x 74 2 x 37	1 x 75 3 x 25 5 x 15	1 x 76 2 x 38 4 x 19	1 x 77 7 x 11	1 x 78 2 x 39 3 x 26 6 x 13	1 x 79	1 x 80 2 x 40 4 x 20 5 x 16 8 x 10

81	82	83	84	85	86	87	88	89	90
1 x 81 3 x 27 9 x 9	1 x 82 2 x 41	1 x 83	1 x 84 2 x 42 3 x 28 4 x 21 6 x 14 7 x 12	1 x 85 5 x 17	1 x 86 2 x 43	1 x 87 3 x 29	1 x 88 2 x 44 4 x 22 8 x 11	1 x 89	1 x 90 2 x 45 3 x 30 5 x 18 6 x 15 9 x 10

91	92	93	94	95	96	97	98	99	100
1 x 91 7 x 13	1 x 92 2 x 46 4 x 23	1 x 93 3 x 31	1 x 94 2 x 47	1 x 95 5 x 19	1 x 96 2 x 48 3 x 32 4 x 24 6 x 16 8 x 12	1 x 97	1 x 98 2 x 49 7 x 14	1 x 99 3 x 33 9 x 11	1 x 100 2 x 50 4 x 25 5 x 20 10 x 10

Starts
with 1

End
with
itself

Rainbow Factoring

$$36 = 1, 2, 3, 4, 6, 9, 12, 18, 36$$

