

Prime factoring

write out the prime factors for each number

120

2	120	$2 \times 2 \times 2 \times 3 \times 5$
2	60	$= 120$
2	30	
3	15	
5	5	
	1	

150

3	150	
2	50	$3 \times 2 \times 5 \times 5$
5	25	$= 150$
5	5	
	1	

200

2	200	
2	100	$2 \times 2 \times 2 \times 5 \times 5$
2	50	$= 200$
5	25	
5	5	

240

320

2 | 240

2 | 320

2 | 120

2 | 160

2 | 60 $2 \times 2 \times 2 \times 2$

2 | 80 $2 \times 2 \times 2 \times 2 \times 2$

2 | 30 $\times 3 \times 5$

2 | 40 $\times 2 \times 5$

3 | 15 $= 240$

2 | 20 $= 320$

5 | 5

2 | 10

1

5 | 5

1

360

400

2 | 360

2 | 400

2 | 180 $2 \times 2 \times 3 \times 3 \times 2$

2 | 200 $2 \times 2 \times 2 \times 2 \times 2$

3 | 90 $\times 5$

2 | 100 $\times 5 \times 5$

3 | 30 $= 360$

2 | 50 $= 400$

2 | 10

5 | 25

5 | 5

5 | 5

1

1

450

2	450	
3	225	$2 \times 3 \times 3 \times 5 \times 5$
3	75	$= 45$
5	25	
5	5	
	1	

540

2	540	
2	270	$2 \times 2 \times 3 \times 3$
3	135	$\times 3 \times 5$
3	45	$= 540$
3	15	
5	5	
	1	

750

2	750	
3	375	$2 \times 3 \times 5 \times 5 \times 5$
5	125	$= 750$
5	25	
5	5	
	1	

600

2	600	
2	300	$2 \times 2 \times 2 \times 3$
2	150	$\times 5 \times 5$
3	75	$= 600$
5	25	
5	5	
	1	

800

780

$$2 \mid 800$$

$$2 \mid 400 \quad 2 \times 2 \times 2$$

$$2 \mid 200 \quad \times 2 \times 2 \times 5$$

$$2 \mid 100 \quad \times 5$$

$$2 \mid 50 \quad = 800$$

$$5 \mid 25$$

$$5 \mid 5$$

1

$$2 \mid 780$$

$$2 \mid 390 \quad 2 \times 2 \times 3 \times 5$$

$$3 \mid 195 \quad \times 13$$

$$5 \mid 65 \quad = 780$$

$$13 \mid 13$$

1

900

840

$$2 \mid 900$$

$$2 \mid 450 \quad 2 \times 2 \times 3 \times 3$$

$$3 \mid 225 \quad \times 5 \times 5$$

$$3 \mid 75 \quad = 900$$

$$5 \mid 25$$

$$5 \mid 5$$

1

$$2 \mid 840$$

$$2 \mid 420 \quad 2 \times 2 \times 3 \times 7$$

$$3 \mid 210 \quad \times 5 \times 7$$

$$7 \mid 70 \quad = 840$$

$$5 \mid 35$$

$$7 \mid 7$$

1