Finding Greatest Common Factor

Name:

Determine the greatest common factor (GCF) of each set of numbers.

12 , 16 To find the GCF of 12 & 16, first write down the factors of each number.

Factors of 12 1 , 2 , 3 , 4 , 6 , 12

Factors of 16 1 , 2 , 4 , 8 , 16

2 & 4 are factors both 12 and 16 have in common, with 4 being the greatest. So **4** is the GCF.

1) 21 , 12

Factors of 21 1 , 3 , 7 , 21

Factors of 12 1 , 2 , 3 , 4 , 6 , 12

2) 2 , 8

Factors of 2 1 , 2

Factors of 8 1 , 2 , 4 , 8

3) 6 , 2

Factors of 6 ____ , ____ , ____ , ____

Factors of 2 ____ , ____

4) 45 , 20

Factors of 45 ____ , ____ , ____ , ____ , ____ , ____

Factors of 20 ____ , ____ , ____ , ____ , ____ , ____

5) 42 , 6

Factors of 42 1 , 2 , 3 , 6 , 7 , 14 , 21 , 42

Factors of 6 1 , 2 , 3 , 6

6) 6 , 33

Factors of 6 1 , 2 , 3 , 6

Factors of 33 1 , 3 , 11 , 33

7) 24 , 27

Factors of 24 ____ , ____ , ____ , ____ , ____ , ____ , ____ , ____

Factors of 27 ____ , ____ , ____ , ____

8) 12 , 20

Factors of 12 ____ , ____ , ____ , ____ , ____ , ____

Factors of 20 ____ , ____ , ____ , ____ , ____ , ____

9) 21 , 27

Factors of 21 ____ , ____ , ____ , ____

Factors of 27 ____ , ____ , ____ , ____

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____

1-9	89	78	67	56	44	33	22	11	0

Finding Least Common Multiple

Name:

Find the least common multiple of both numbers.

To find the least common multiple one strategy is to list the multiples of the numbers.

4	4	8	12	16	20	24	28	32	36	40	44	48
6	6	12	18	24	30	36	42	48	54	60	66	72

Some of the multiples 4 and 6 have in common are: 12, 24, 36 & 48.
The common multiple that is least is 12.

1)
6: 6 12 18 24 30 36 42 48
8: 8 16 24 32 40 48 56 64
24

2)
4: 4 8 12 16 20 24 28 32 36 40 44 48
12: 12 24 36 48 60 72 84 96 108 120 132 144

3)
11: 11 22 33 44 55 66 77 88 99 110 121
5: 5 10 15 20 25 30 35 40 45 50 55
55

4)
2: ____ ____ ____ ____ ____ ____ ____ ____
8: ____ ____ ____ ____ ____ ____ ____ ____

5)
11: ____ ____ ____ ____ ____ ____ ____ ____ ____ ____ ____ ____
12: ____ ____ ____ ____ ____ ____ ____ ____ ____ ____ ____ ____

6)
6: ____ ____ ____ ____ ____ ____ ____
7: ____ ____ ____ ____ ____ ____ ____

7)
9: 9 18 27 36 45 54 63 72 81
5: 5 10 15 20 25 30 35 40 45
45

8)
2: ____ ____ ____ ____ ____
5: ____ ____ ____ ____ ____

9)
2: ____ ____ ____ ____ ____ ____ ____ ____ ____
9: ____ ____ ____ ____ ____ ____ ____ ____ ____

10)
3: ____ ____ ____ ____ ____ ____
6: ____ ____ ____ ____ ____ ____

Answers

1. ____
2. ____
3. ____
4. ____
5. ____
6. ____
7. ____
8. ____
9. ____
10. ____

1-10	90	80	70	60	50	40	30	20	10	0

2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, . . .

Finding Prime Factors

Name:

Find the prime factors for each number.

1) 81 = 3 · 3 · 3 · 3 composite number

2) 41 = 1 · 41 prime

3) 70 = 2 · 5 · 7

4) 39 = 3 · 13

5) 91 = 7 · 13

6) 43 =

7) 34 =

8) 16 = 2 · 2 · 2 · 2

9) 26 =

10) 86 =

11) 18 =

12) 99 =

13) 28 =

14) 47 =

15) 62 =

16) 94 =

17) 68 =

18) 72 =

19) 45 =

20) 47 =

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____

1-10	95	90	85	80	75	70	65	60	55	50
11-20	45	40	35	30	25	20	15	10	5	0

Rewriting Expressions as Multiples of a Sum Name:

Use the distributive property to rewrite the expression as a multiple of a sum of two numbers with no common factor.

Ex) 6 + 30 6×(1+5)

1) 33 + 30 _____

2) 6 + 18 _____

3) 30 + 16 _____

4) 27 + 39 _____

5) 9 + 21 _____

6) 45 + 30 _____

7) 6 + 12 _____

8) 4 + 18 _____

9) 6 + 27 _____

10) 36 + 24 _____

11) 6 + 10 _____

12) 36 + 9 _____

HW
Packet 13 (evens)
Supplemental WS
Online HW 29 due May 11th
Quiz 29
HW Q 27 due April 30th
HW Q 28 due May 7th

Answers

Ex. 6×(1+5)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____

1-10	92	83	75	67	58	50	42	33	25	17
11-12	8	0								