

COMMON FACTORS

TARGET To find all the factors of a number and common factors of two numbers.

Factors are numbers that divide exactly into another number.

Two or more numbers may have common factors as well as 1. The largest of these is the highest common factor.

Examples
 Factors of 12 1, 2, 3, 4, 6, 12
 Factors of 30 1, 2, 3, 5, 6, 10, 15, 30

Common factors of 12 and 30 1, 2, 3, 6

Highest common factor of 12 and 30 is 6.

Copy and complete the second factor in each pair.

1 16 → 2 and

2 35 → 7 and

3 44 → 11 and

4 27 → 3 and

5 40 → 5 and

6 24 → 8 and

7 90 → 9 and

8 48 → 6 and

9 28 → 4 and

10 72 → 12 and

11 100 → 2 and

12 5 → 5 and

Find all the factors of the following numbers. The number of factors is shown in brackets.

13 8 (4) 17 15 (4)

14 25 (3) 18 32 (6)

15 22 (4) 19 60 (12)

16 18 (6) 20 36 (9)

Find all the factors of:

1 98

2 52

3 66

4 63

5 48

6 84

7 102

8 78

9 90

10 132

11 140

12 108

13 127

14 117

15 124

16 112.

Find the common factors of each pair of numbers.

17 6, 9

18 8, 10

19 12, 16

20 18, 30

21 20, 30

22 40, 100

23 24, 32

24 12, 15

25 15, 20

26 14, 35

27 8, 12

28 6, 14

29 24, 36

30 12, 18

31 20, 25

32 27, 36

Find all the factors of:

1 133

2 138

3 144

4 162

5 176

6 182

7 184

8 250.

Find the highest common factor of each group of numbers.

9 6, 12, 16

10 10, 25, 100

11 16, 24, 40

12 6, 12, 24

13 20, 50, 100

14 9, 12, 18

15 8, 16, 20

16 21, 28, 35

17 50, 75, 100

18 18, 36, 72

19 30, 60, 75

20 36, 48, 60