



# Factoring - Venn Diagrams - 2 Numbers - Populate Venn

**1** Populate the prime factor diagram. Put shared factors in the center.

9      18

<b>A</b> 9      18 3 3 2	<b>B</b> 9      18 5      2 3 3	<b>C</b> 9      18 3 3      5
<b>D</b> 9      18 3 3      2 2	<b>E</b> 9      18 2      2 3 3	<b>F</b> 9      18 3      3 2 2

**2** Populate the prime factor diagram. Put shared factors in the center.

24      21

<b>A</b> 24      21 23      3 7	<b>B</b> 24      21 2 2      3 7 2	<b>C</b> 24      21 2 2      19 2 3
<b>D</b> 24      21 3 7	<b>E</b> 24      21 2 2      2 3 2 3	<b>F</b> 24      21 2 2      5 5 2 3

**3** Populate the prime factor diagram. Put shared factors in the center.

22      24

<b>A</b> 22      24 11      2 3 3	<b>B</b> 22      24 11      2 2 5	<b>C</b> 22      24 2 11      19
<b>D</b> 22      24 5 5      2 2 2 3	<b>E</b> 22      24 2 11	<b>F</b> 22      24 11      2 2 2 3

**4** Populate the prime factor diagram. Put shared factors in the center.

22      16

<b>A</b> 22      16 11      2 2 2 2	<b>B</b> 22      16 2 11	<b>C</b> 22      16 11      2 2 5
<b>D</b> 22      16 3 3      2 2 2 2	<b>E</b> 22      16 3 7      2 2 2 2	<b>F</b> 22      16 11      2 3 3

**5** Populate the prime factor diagram. Put shared factors in the center.

8      22

<b>A</b> 8      22 2 2      7 2	<b>B</b> 8      22 7      2 11	<b>C</b> 8      22 11 2
<b>D</b> 8      22 2 2      2 11	<b>E</b> 8      22 2 2      3 2	<b>F</b> 8      22 2      2 2

**6** Populate the prime factor diagram. Put shared factors in the center.

10      20

<b>A</b> 10      20 2 5 2	<b>B</b> 10      20 2 5      7	<b>C</b> 10      20 5      2 2 2
<b>D</b> 10      20 11      2 2 5	<b>E</b> 10      20 7      2 2 5	<b>F</b> 10      20 3      2 2 5

**7** Populate the prime factor diagram. Put shared factors in the center.

12      21

<b>A</b> 12      21 3      2 2 2 2	<b>B</b> 12      21 2 2      3 7	<b>C</b> 12      21 2 2      3 7 2 2
<b>D</b> 12      21 3      2 2 2	<b>E</b> 12      21 13      3 7	

**8** Populate the prime factor diagram. Put shared factors in the center.

18      22

<b>A</b> 18      22 3 3      2 2 5	<b>B</b> 18      22 2 3      3 7	<b>C</b> 18      22 2 3      3 3
<b>D</b> 18      22 3 5      2 11	<b>E</b> 18      22 2 3      17 3	<b>F</b> 18      22 3 3      2 11