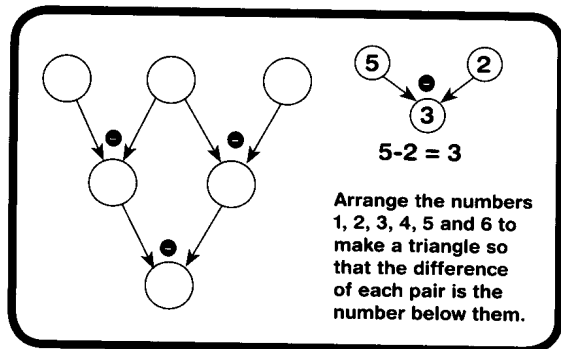


Number Circuits

Number Circuits Puzzles come in all sizes and shapes, including squares, circles, triangles, lines and many other geometric shapes. Number Circuits require the puzzler to arrange the provided numbers in a specific order and shape. They require and develop mental arithmetic skills, including addition and subtraction, as well as number familiarity.

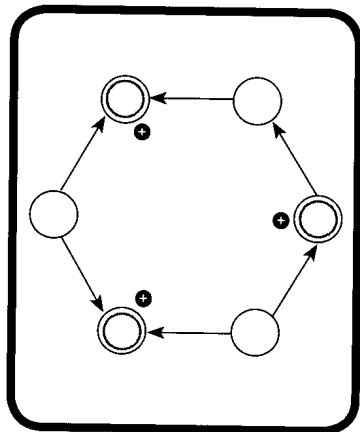


Arrange the numbers 1, 2, 3, 4, 5 and 6 to make a triangle so that the difference of each pair is the number below them.

In the puzzle to the left, the numbers 1 through 6 must be placed in each of the six circles. Each number must be placed into a circle so it is the difference of the two numbers pointing to it.

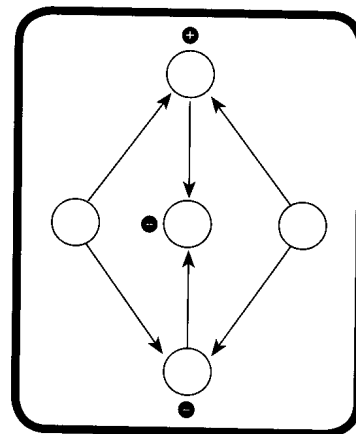
It's interesting that, in this puzzle, 6 can't be the bottom number and it can't be in the middle row, since it can never be the difference between any two of the other five numbers. So, 6 must be in the top row. This is just an example of how to start a puzzle.

Throughout the puzzles, there are often arithmetic signs (e.g. +, -) next to a circle. These indicate how the two numbers adjacent or pointing to the circle should be combined.

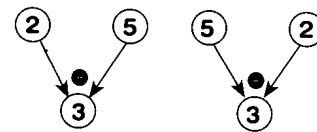


In the hexagon to the left, the "+" next to the gray circles indicate that the number to be placed into each is the "sum" of the two adjacent circles.

In the diamond to the right, the number in the top circle is the sum (+) of the two circles pointing to it. The number in the bottom circle is the difference (-) of the two circles pointing to it. The number in the center is the difference (-) of the numbers in the top and bottom circles.



In many puzzles, the "difference" of two numbers is often asked for. It is important to note that the difference between two numbers is always positive. Although $2-5$ is not positive, the difference between 2 and 5 is the same as the difference between 5 and 2, which is 3. Therefore, unless specifically stated, when the difference of two numbers is called for, the larger number does not have to be on the left side. In the example on the right, both are valid.



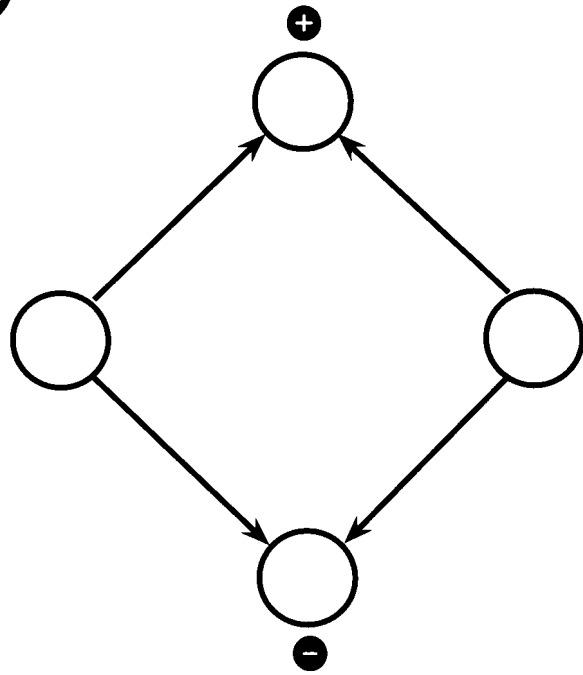
Number Circuits Puzzles are unique, fun, instructive and challenging. When tackling and solving them, children will get a deserved sense of arithmetic accomplishment and success.

1

Circuit Diamond

Arrange the numbers
1, 2, 3 and 4 to make
a diamond so that the

top = left + right
bottom = left - right

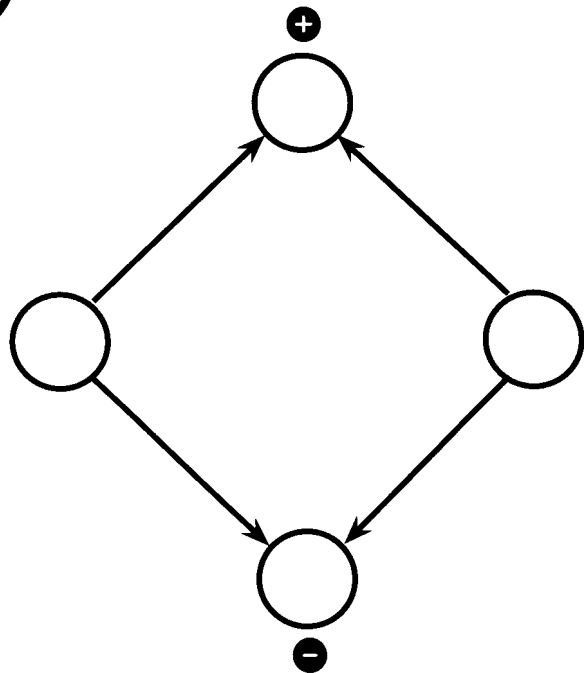


2

Circuit Diamond

Arrange the numbers
1, 2, 3 and 5 to make
a diamond so that the

top = left + right
bottom = left - right

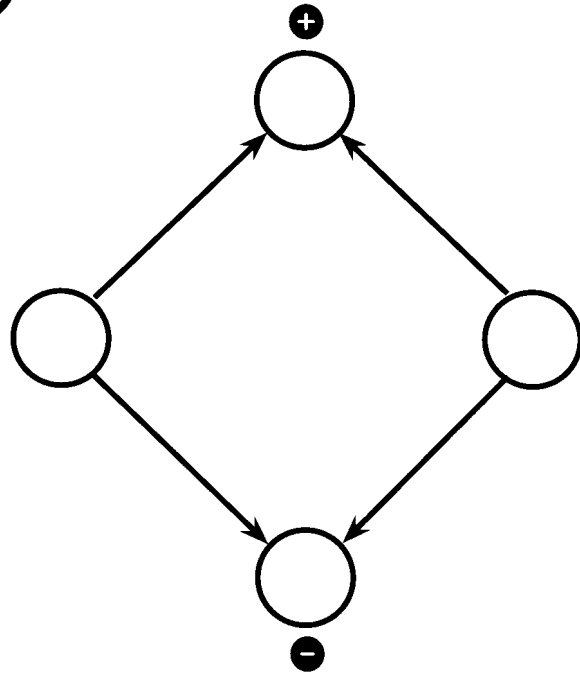


3

Circuit Diamond

Arrange the numbers
2, 3, 5 and 7 to make
a diamond so that the

top = left + right
bottom = left - right

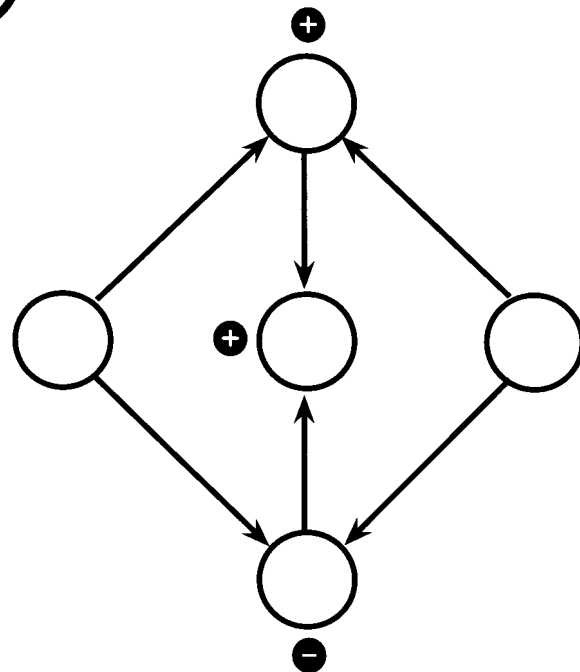


4

Circuit Diamond

Arrange the numbers
1, 2, 3, 5 and 6 to make
a diamond so that the

top = left + right
bottom = left - right
center = top + bottom

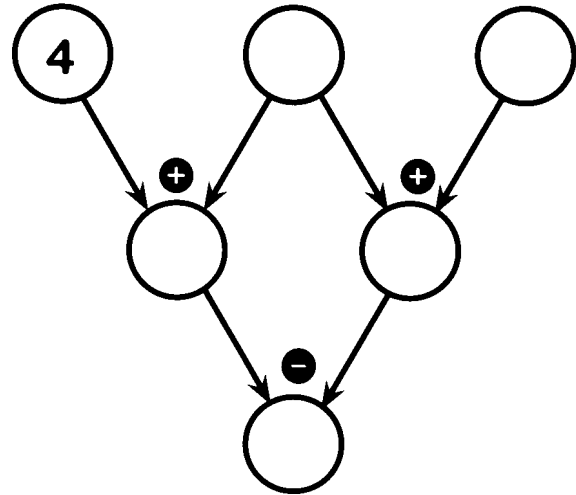
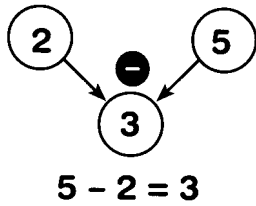


1

Circuit Triangle

Arrange the numbers 1, 2, 3, 4, 5 and 6 to make a triangle so that the combination of each pair is the number below them.

Example

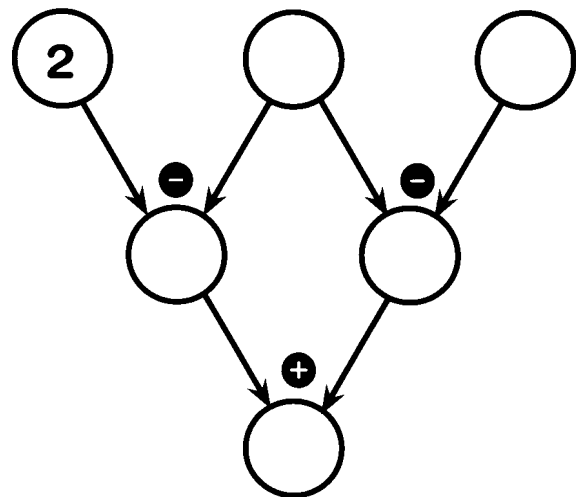
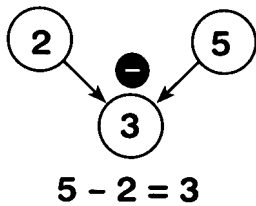


2

Circuit Triangle

Arrange the numbers 1, 2, 3, 4, 5 and 6 to make a triangle so that the combination of each pair is the number below them.

Example

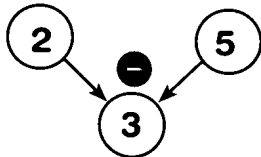


3

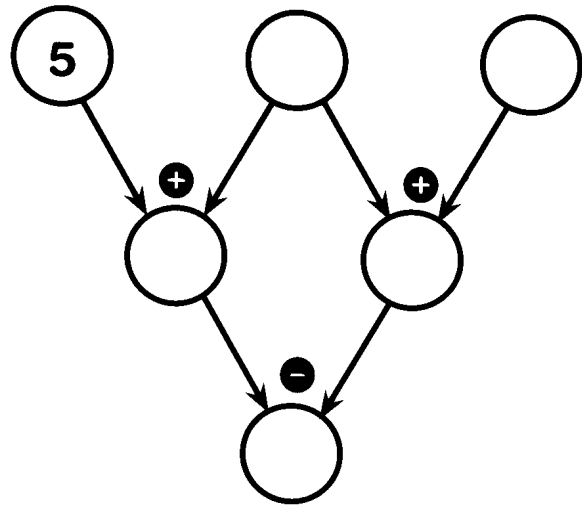
Circuit Triangle

Arrange the numbers 1, 2, 3, 4, 5 and 6 to make a triangle so that the combination of each pair is the number below them.

Example



$$5 - 2 = 3$$

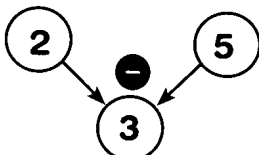


4

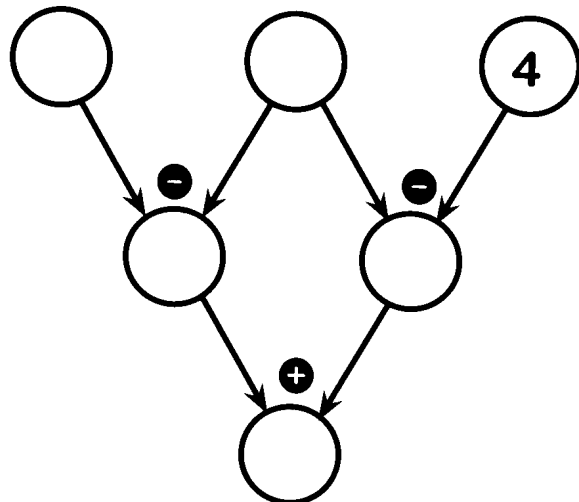
Circuit Triangle

Arrange the numbers 1, 2, 3, 4, 5 and 6 to make a triangle so that the combination of each pair is the number below them.

Example



$$5 - 2 = 3$$

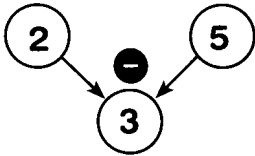


5

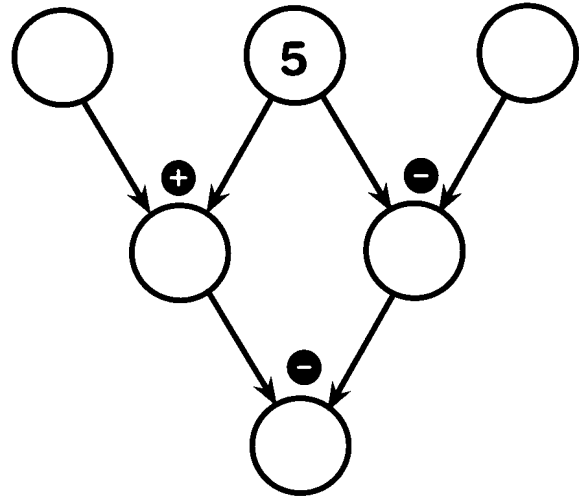
Circuit Triangle

Arrange the numbers 1, 2, 3, 4, 5 and 6 to make a triangle so that the combination of each pair is the number below them.

Example



$$5 - 2 = 3$$

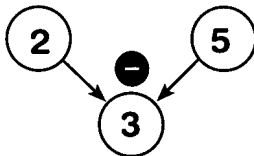


6

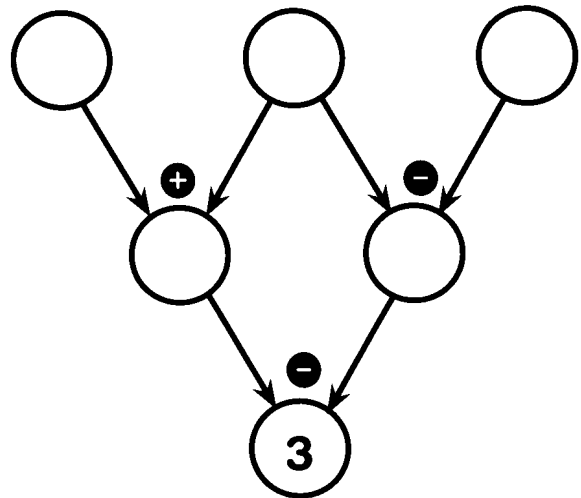
Circuit Triangle

Arrange the numbers 1, 2, 3, 4, 5 and 6 to make a triangle so that the combination of each pair is the number below them.

Example



$$5 - 2 = 3$$

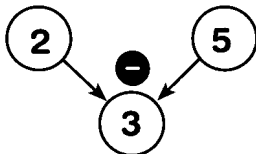


7

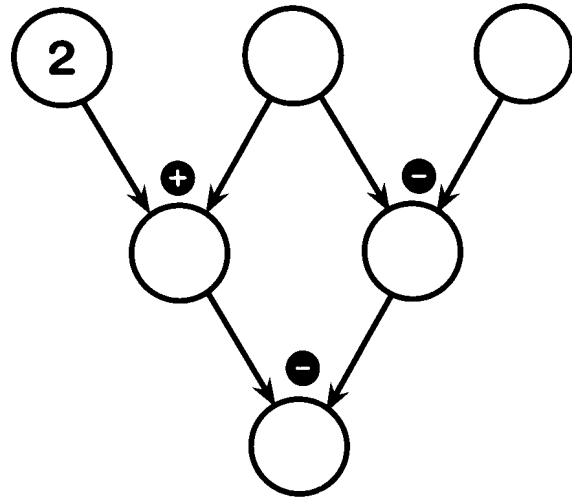
Circuit Triangle

Arrange the numbers 1, 2, 3, 4, 5 and 6 to make a triangle so that the combination of each pair is the number below them.

Example



$$5 - 2 = 3$$

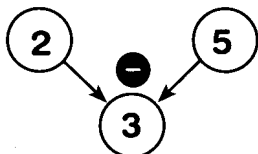


8

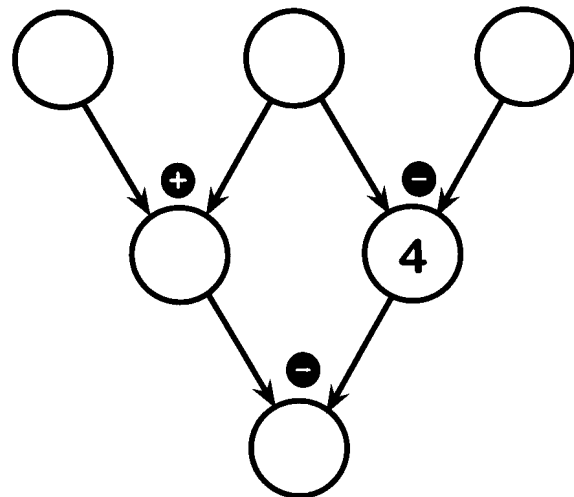
Circuit Triangle

Arrange the numbers 1, 2, 3, 4, 5 and 6 to make a triangle so that the combination of each pair is the number below them.

Example



$$5 - 2 = 3$$

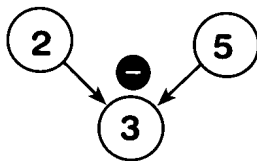


9

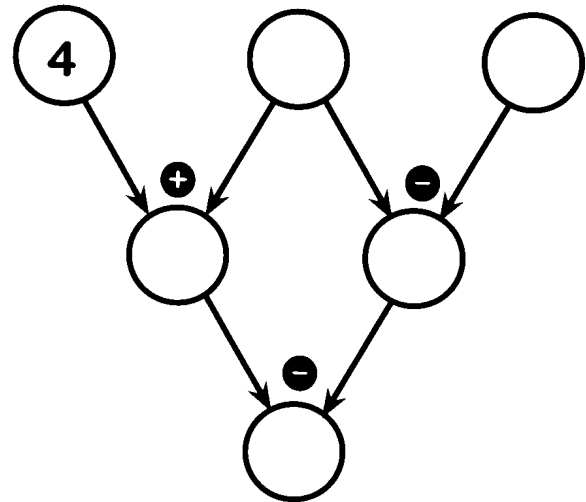
Circuit Triangle

Arrange the numbers 1, 2, 3, 4, 5 and 6 to make a triangle so that the combination of each pair is the number below them.

Example



$$5 - 2 = 3$$

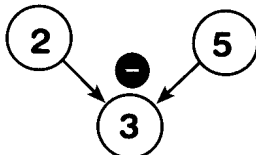


10

Circuit Triangle

Arrange the numbers 1, 2, 3, 4, 5 and 6 to make a triangle so that the combination of each pair is the number below them.

Example



$$5 - 2 = 3$$

