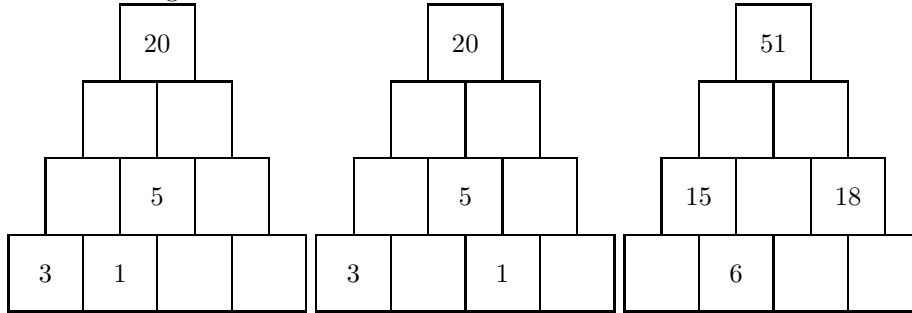
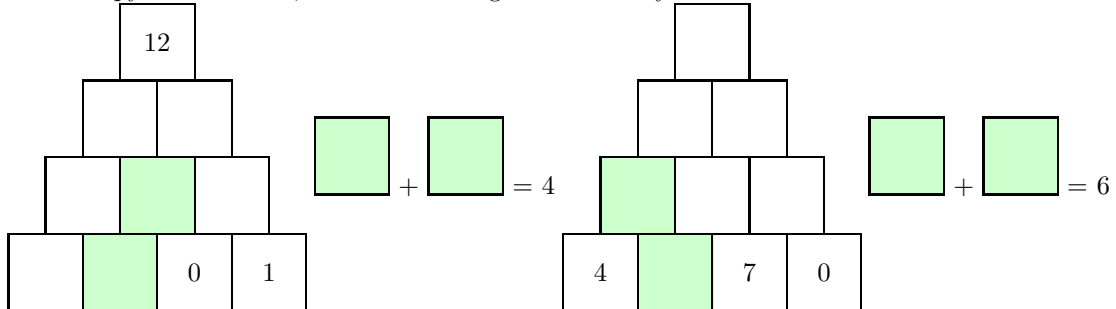


Grades 2/3

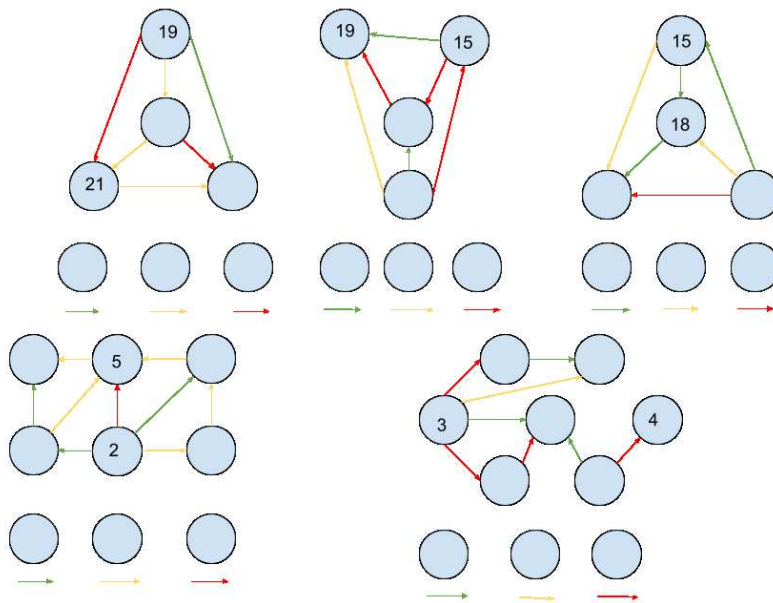
1. In the pyramids below, a number in a cell is a sum of the numbers in the two cells below. Fill in the missing numbers.



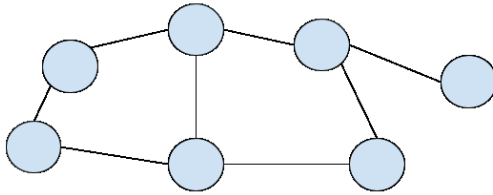
2. In the pyramids below, fill in the missing numbers. Pay attention to the additional conditions.



3. In the diagrams below, the arrows of the same color stand for the same number. The following must hold: "value at arrow start" + "arrow value" = "value at arrow target". For example, $2 \rightarrow 5$ means that the arrow stands for "3". Fill in the missing numbers, and find out the arrow value for each color.



4. There are two bus lines connecting the stops A, B, C, D, E, F, G: C-A-F-G-E and A-E-D-B-G. Complete the picture with bus stop names.



5. Alice and Bob play the following game: One player picks a number from 1, 2, 3, ..., 16, the other player is allowed to ask questions that the first player can answer with yes/no. Alice says she can always guess Bob's number with only 4 questions. Is that true?

6. Three siblings put together their money and bought a ball. Peter paid a half, Paul a quarter, and Mary the remaining \$2. How much did the ball cost?

7. There are 21 students in a class, 11 of them boys. 12 students play some instrument, $\frac{1}{3}$ of them are boys. How many children don't play any instruments, how many of them are girls, how many are boys?