Puzzle of the Week Balance Beam – 1

To balance, weights must be the same on opposite sides of a horizontal balance beam. The total weight is given above the balance beam.

In a given puzzle, figures of the same shape must have the same weight. However, it is allowed for different shapes to have the same weight.



THE CHALLENGE: The squares each have weight 2. Find the weight of each of the triangles and the total weight of all the figures.



EXPLORATION: Create balance beams for others to solve. Make sure there is enough information that they can be figured out.





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Puzzle of the Week Balance Beam – 1 - Notes

THE CHALLENGE: Replace the squares with 2's. This means that the three triangles on the left side balance with a triangle plus 6 (three 2's) on the right. For these two sides to be equal, two triangles must balance with the 6. So, each triangle has a weight of 3.

Replacing the triangles with 3's means that there are a total of 9 on each side, which gives a grand total of 18 for the whole balance beam.