

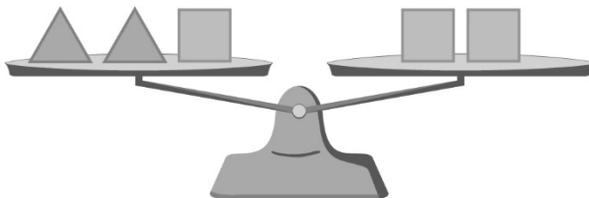
Master 40a

Connections: Balance Puzzles

Do you like to do puzzles?
 Have you ever tried a balance puzzle?

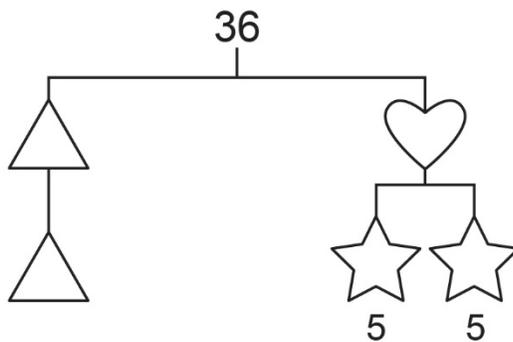
When things are balanced, the quantities on both sides are equal.

What do you know about the shapes on this pan balance?



A triangle has a mass equal to one-half the mass of a square.

What do you know about the shapes on this balance mobile?



The whole mobile represents 36.
 What does each side represent?
 Find what each shape represents, given that a star is 5.

Master 40b

Connections: Balance Puzzles

Solve this puzzle.

$$\text{Soccer Ball} + \text{Soccer Ball} + \text{Soccer Ball} = 15$$

$$\text{Soccer Ball} + \text{Basketball} + \text{Basketball} = 21$$

$$\text{Basketball} + \text{Football} = 20$$

$$\text{Soccer Ball} + \text{Basketball} + \text{Football} = ?$$

Try making a balance puzzle of your own.
Then trade puzzles with a classmate and solve each other's puzzles.