Chapter 13

Lesson 4

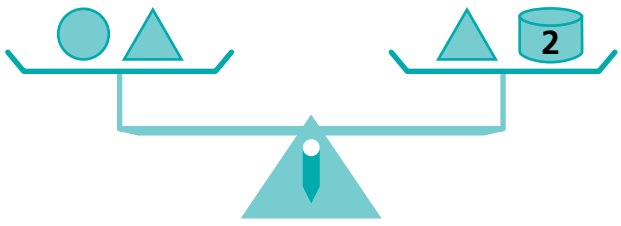
Name _____ Date _____

# Balance Puzzles

NCTM Standards 1, 2, 7, 9, 10

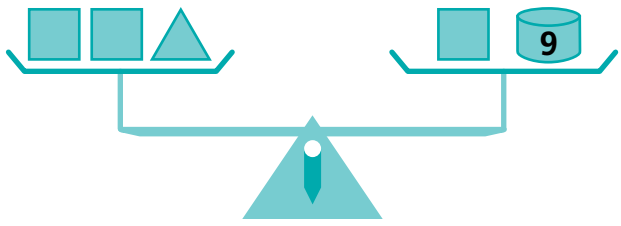
**Solve these balance puzzles.**

**1**



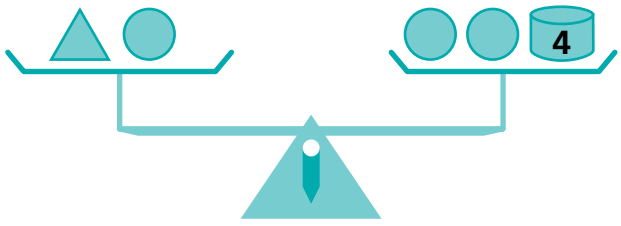

△ = 1 ○ = ____

**2**



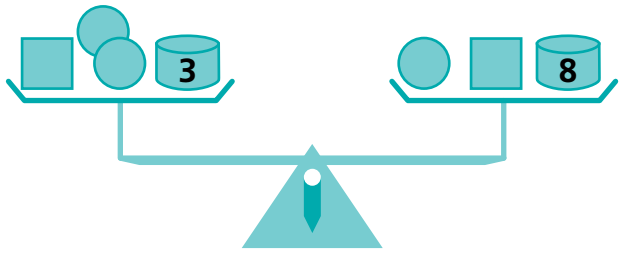

△ = 3 □ = ____

**3**




△ = ____ ○ = $3\frac{1}{2}$

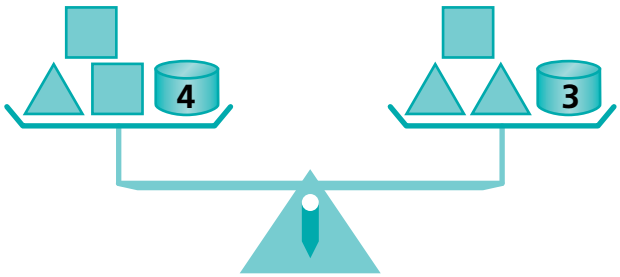
**4**

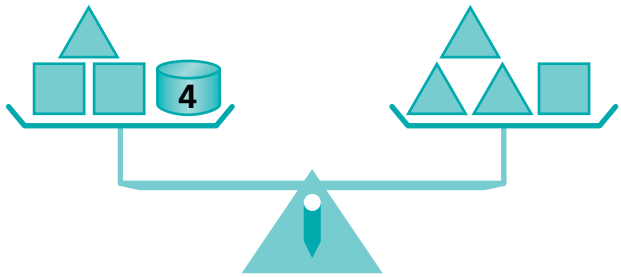



○ = ____

**5** Laurel wrote the following equation: 3△ + □ = △ + 2□ + 4

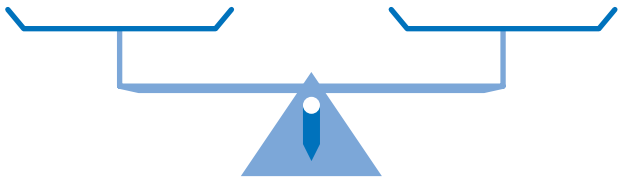
She sketched two diagrams of balance puzzles. Select and circle the diagram that matches the equation.



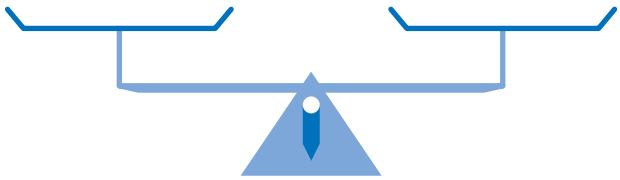



**Draw shapes in the balances to represent these equations.**

**6** $2s + c = c + 8$

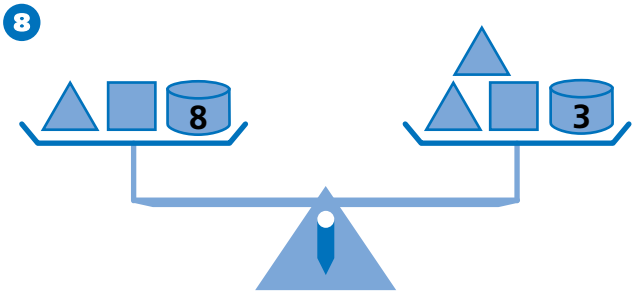


**7** $c + s + 2t = t + 2s + 3$



**Write equations for these balance puzzles. Can you find the weights of any of the shapes (triangle or square)?**

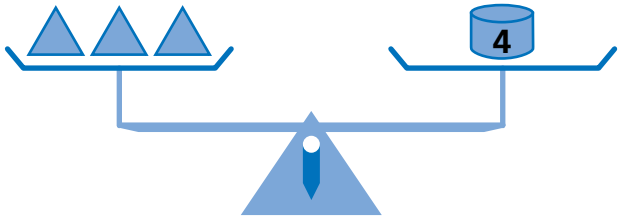
**8**




Equation: _____

Shape weights: _____

**9**

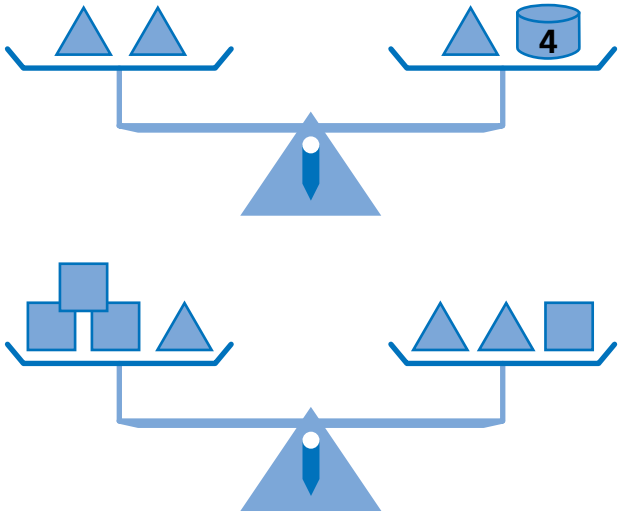



Equation: _____

Shape weights: _____

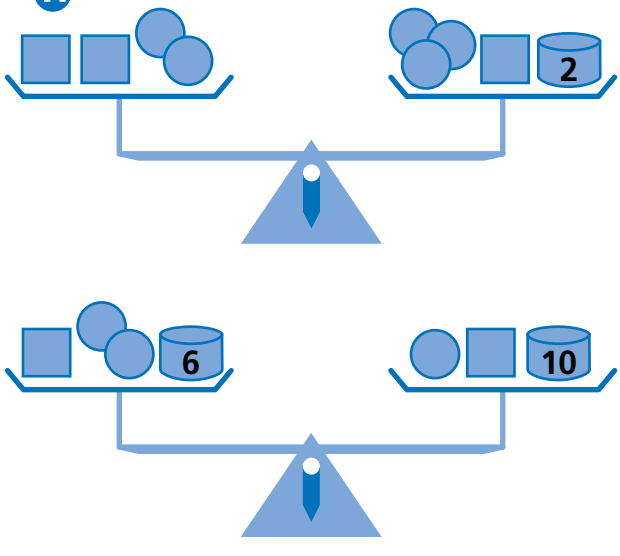
**Challenge** Each pair of puzzles has enough information for you to find the weights of both kinds of blocks. Find the weights!

**10**




▲ = ____ ■ = ____

**11**




● = ____ ■ = ____