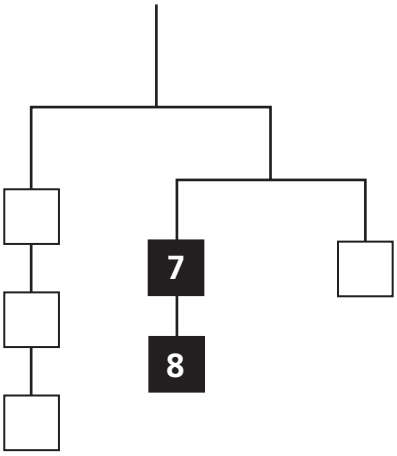
Name _____ Date _____

Extension
Lesson 1

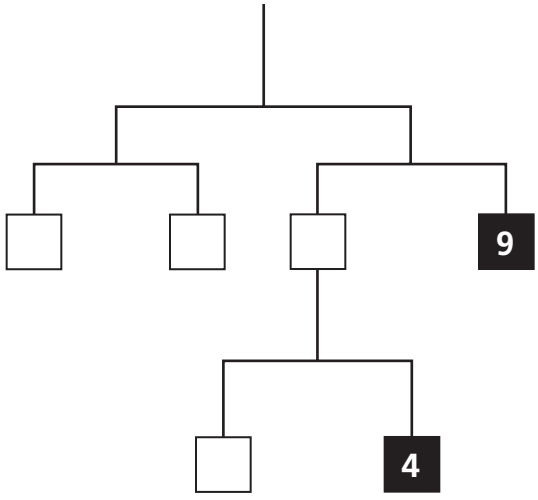
Introducing Mobiles

Complete the balanced mobiles.

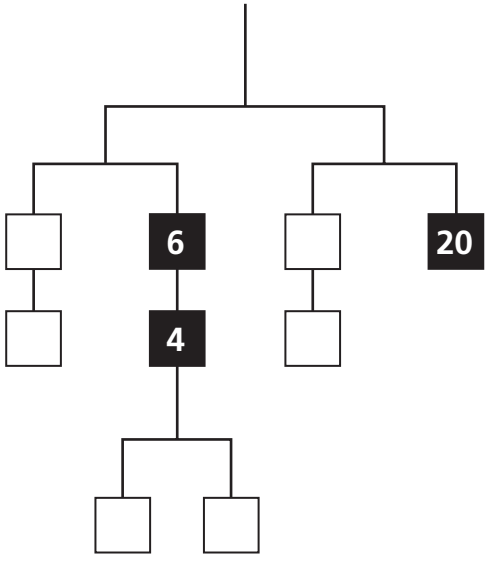
1 Total Weight: _____



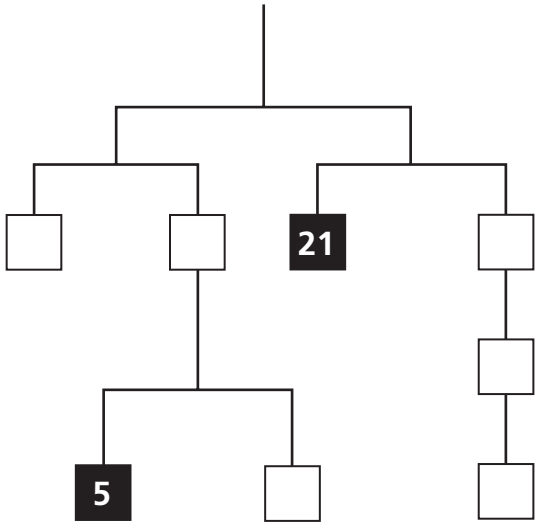
2 Total Weight: _____



3 Total Weight: _____



4 Total Weight: _____



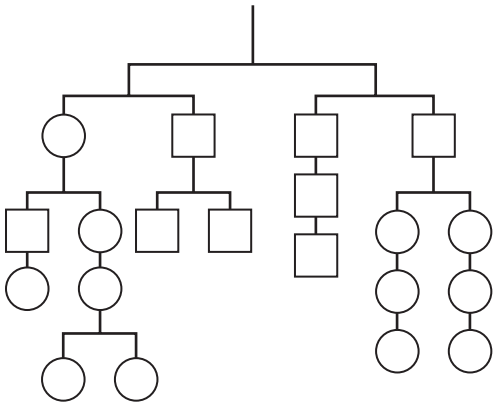
Name _____ Date _____

Extension
Lesson 2

Balancing Mobiles

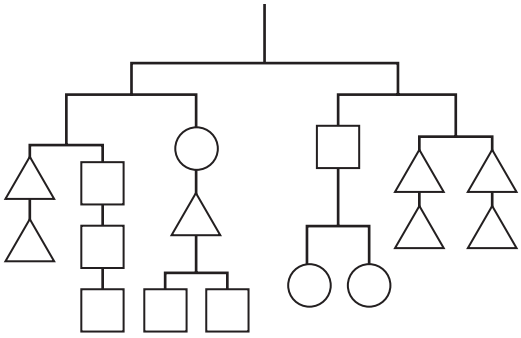
Solve these mobile puzzles.

1 Total Weight: 72



□ = ____ ○ = ____

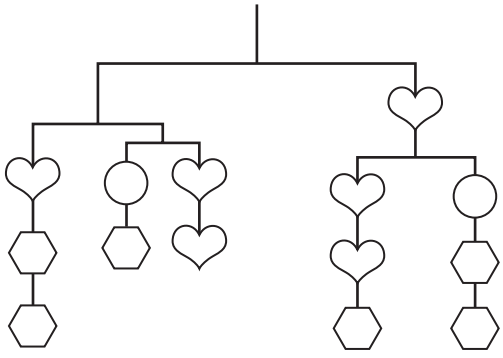
2 Total Weight: 48



△ = ____

□ = ____ ○ = ____

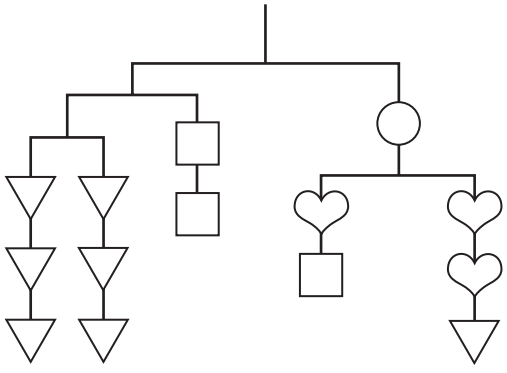
3 Total Weight: 96



⬡ = ____

♡ = ____ ○ = ____

4 Total Weight: 48



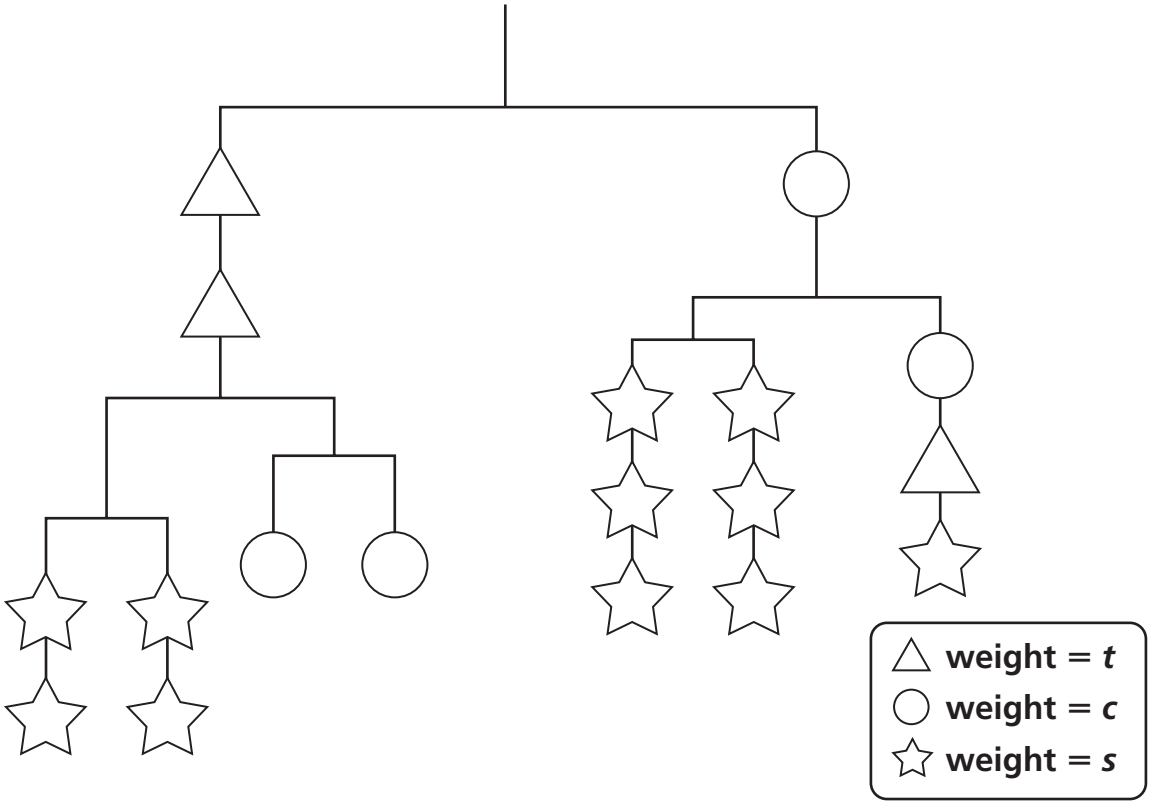
□ = ____ ○ = ____

♡ = ____ ▽ = ____

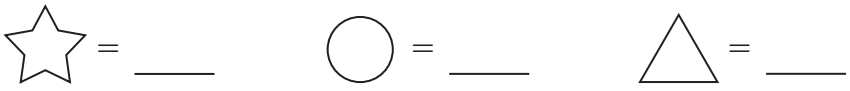
Name _____ Date _____

Equations for Mobiles

Total Weight: 84



Write three equations that match this mobile.



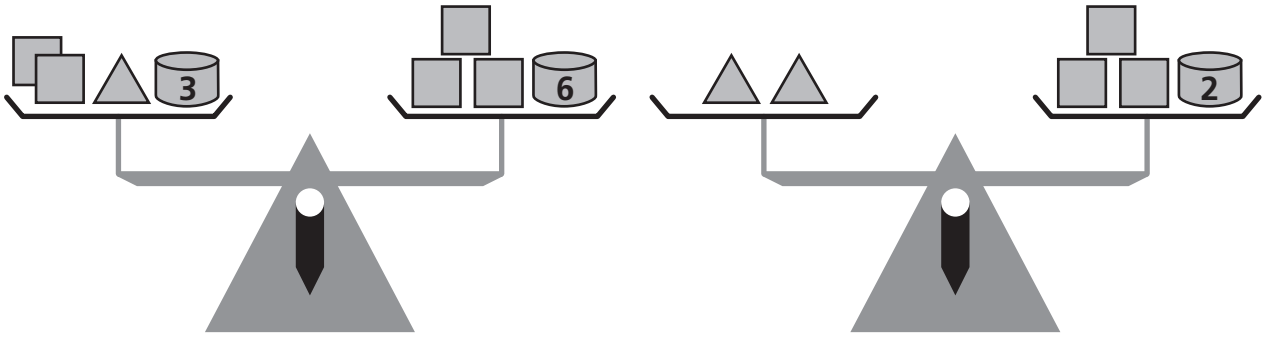
Name _____ Date _____

Extension
Lesson 4

Balance Puzzles

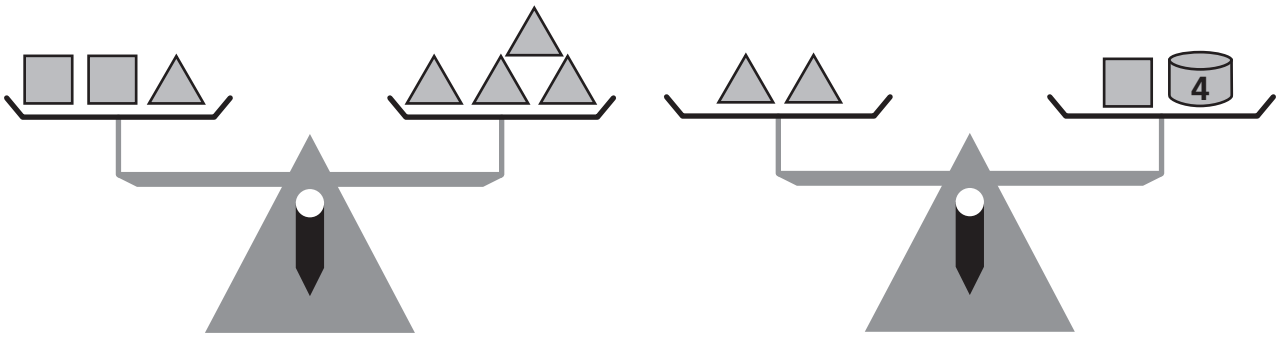
Use all the balances in a problem to find the weights of each kind of block. You must use the information in one balance to help you solve another!

1



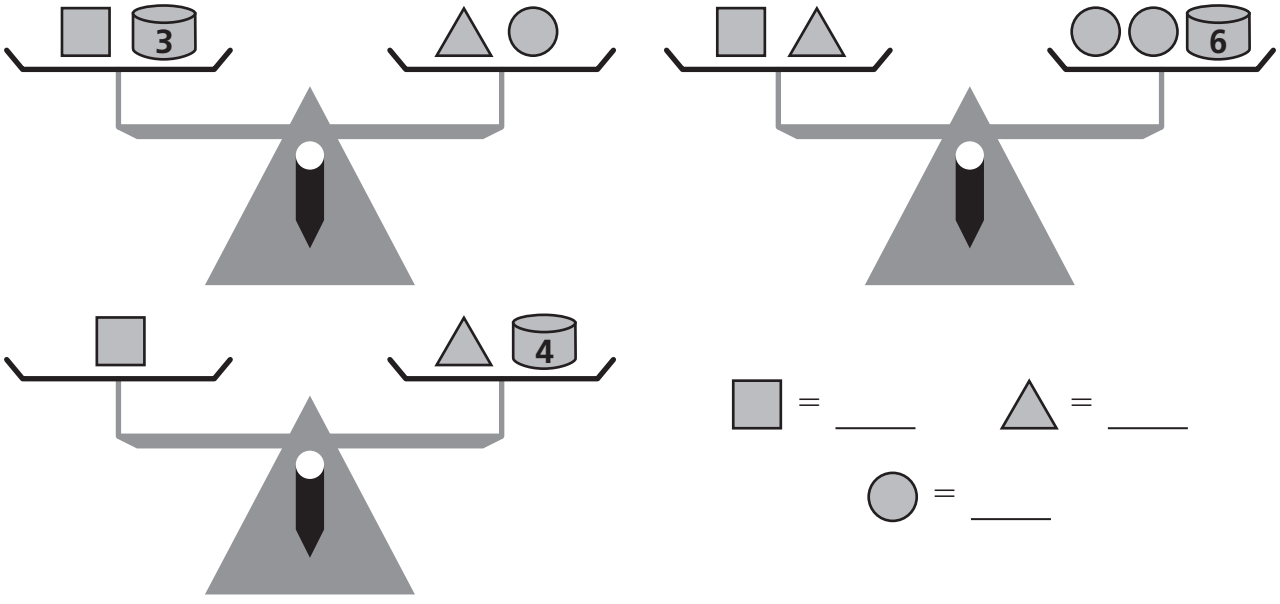
□ = ____ △ = ____

2



□ = ____ △ = ____

3



□ = ____ △ = ____

○ = ____

Name _____ Date _____

Extension
Lesson 5

Number Tricks

Pick any four consecutive counting numbers. (for example: 8, 9, 10, 11 or 25, 26, 27, 28)

1. Combine the four numbers to make an equation, following these rules:

   - Use each number once.
   - Use the numbers in any order.
   - Use one = sign.
   - Use any of the signs +, −, ÷, × in any combination.

2. Find a second equation that you can make with the same four numbers.

3. What if you had picked a different set of four consecutive counting numbers? Use shorthand, words, or both to describe rules for making two different equations that will work for any four consecutive counting numbers.

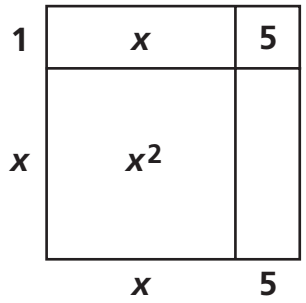
Name _____ Date _____

Extension
Lesson 6

Making Diagrams

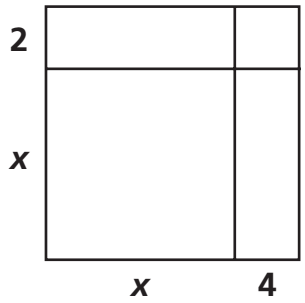
Find the area of each section in the diagrams. Then find the total area.

1



Area = $x^2 +$ _____

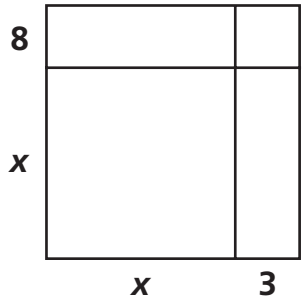
2



Area = _____

_____

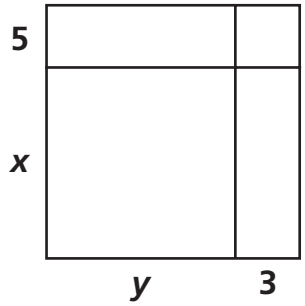
3



Area = _____

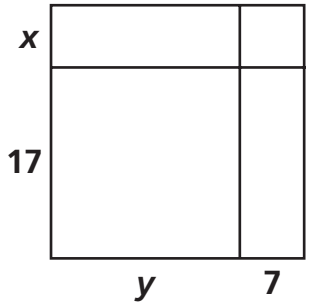
_____

4



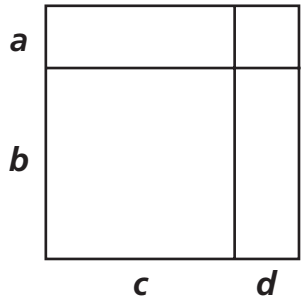
Area = _____

5



Area = _____

6



Area = _____

Name _____ Date _____

Extension
Lesson 7

Equations for Stories

Juan's Bicycle Shop sells both bicycles and tricycles.

One day there were ***B*** bicycles and ***T*** tricycles.

A Write an equation for the total number of wheels, ***W***, on ***B*** bicycles and ***T*** tricycles. _____

B Write an equation for the total number of seats, ***S***, on ***B*** bicycles and ***T*** tricycles. _____

C Juan counted 35 wheels. On the graph below, mark with dots all the possible combinations of bicycles and tricycles. (One combination has been marked for you—one bicycle and eleven tricycles.)

D Juan also counted 15 seats. Mark with Xs the possible combinations that give 15 seats. (Two combinations have already been marked.)

E How many bicycles and tricycles were there? _____