The Whiskers Rescue Lock

Calculate the value of each feline symbol to crack the four-digit code on the cat shelter food vault.

Name: _____ **Date:** _____

1 THE KEY

▭ = ▭ ○ = 19 ◇ = ▭ ◈ = ▭ ⬟ = 11

★ = 20

Every symbol is a whole number from 1 to 20. A number in front of a shape means multiply: 2 stars = 2 x star.

2 FIND THE MISSING VALUES

Some shapes in the key are missing. Use these to work them out, in order, and write them into the key.

◆² = 169

2■ + ⬟ = 27

● + ○ = 29

3 CRACK THESE

1. ★ + ◆ × ● = ▭

2. 10○ - ⬟ = ▭ CODE 1

3. ○ × ◆ - ■ = ▭

4. 10○ - ★ = ▭ CODE 2

5. ◆ + ○ × ● = ▭

6. ★ ÷ 2 + ■ = ▭ CODE 3

7. ■ ÷ 2 + ● = ▭

8. ★ × ◆ ÷ ● = ▭ CODE 4

9. ● × ★ - ⬟ = ▭

10. ★ × ◆ × ■ = ▭

4 THE VAULT CODE

▭ ▭ ▭ ▭

Write the ONES digit of your answers to problems 2, 4, 6, 8 (the ones tagged CODE 1-4), in that order. That opens the cat shelter food.

TEACHER / PARENT

Answer Key

The Whiskers Rescue Lock · Grade 5 Crack the Code

The key

■ square = **8** (hidden) ○ ring = **19** ● circle = **10** (hidden) ◆ diamond = **13** (hidden) ⬟ pentagon = **11** ★ star = **20**

Every symbol is a whole number from 1 to 20.

1.	★ + ◆ × ● (star + diamond x circle)	**150**
2.	**10** ○ - ⬟ (10 x ring - pentagon)	**179**
3.	○ × ◆ - ■ (ring x diamond - square)	**239**
4.	**10** ○ - ★ (10 x ring - star)	**170**
5.	◆ + ○ × ● (diamond + ring x circle)	**203**
6.	★ ÷ **2** + ■ (star / 2 + square)	**18**
7.	■ ÷ **2** + ● (square / 2 + circle)	**14**
8.	★ × ◆ ÷ ● (star x diamond / circle)	**26**
9.	● × ★ - ⬟ (circle x star - pentagon)	**189**
10.	★ × ◆ × ■ (star x diamond x square)	**2080**

Vault code: **9 0 8 6**