Court Code Breaker

Determine the numerical value of each basketball symbol to crack the four-digit lock on the coach's secret strategy vault before tip-off.

Name: _____ **Date:** _____

1 THE KEY

◆ = 9 ? = ☐ ⬢ = 4 ✚ = ☐ ☾ = ☐ ★ = 13

Every symbol is a whole number from 1 to 15. 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.

✚ + ✚ + ✚ = 21

■ × ⬢ = 32

☾ + ☾ + ☾ = 45

3 CRACK THESE

1. 10■ - ☾ = ☐

2. (⬢ + ■) × ☾ = ☐ CODE 1

3. 3⬢ + 2☾ = ☐

4. ☾ × ✚ = ☐ CODE 2

5. ☾ × ⬢ - ◆ = ☐

6. ◆ × ■ - ★ = ☐ CODE 3

7. ⬢ × ◆ = ☐

8. (◆ - ⬢) × ☾ = ☐ CODE 4

9. ■ × ★ + ✚ = ☐

10. 3◆ + 2✚ = ☐

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 coachs secret strategy.

TEACHER / PARENT

Answer Key

Court Code Breaker · Grade 4 Crack the Code

The key

◆ diamond = **9** ■ square = **8** (hidden) ⬢ hexagon = **4** ✚ cross = **7** (hidden) ☾ moon = **15** (hidden)

★ star = **13**

Every symbol is a whole number from 1 to 15.

1.	**10** ■ − ☾ (10 x square - moon)	**65**
2.	(⬢ + ■) × ☾ ((hexagon + square) x moon)	**180**
3.	**3** ⬢ + **2** ☾ (3 x hexagon + 2 x moon)	**42**
4.	☾ × ✚ (moon x cross)	**105**
5.	☾ × ⬢ − ◆ (moon x hexagon - diamond)	**51**
6.	◆ × ■ − ★ (diamond x square - star)	**59**
7.	⬢ × ◆ (hexagon x diamond)	**36**
8.	(◆ − ⬢) × ☾ ((diamond - hexagon) x moon)	**75**
9.	■ × ★ + ✚ (square x star + cross)	**111**
10.	**3** ◆ + **2** ✚ (3 x diamond + 2 x cross)	**41**

Vault code: **0 5 9 5**