

Championship Locker Code Breaker

Solve the equations using the soccer balls, cleats, and championship trophies to find the digits for the team locker combination.

Name: _____ Date: _____

1 THE KEY

$$\begin{array}{ccccccc} \text{?} = \square & \text{?} = \square & \text{?} = \square & \text{?} = 20 & \text{?} = 9 & \text{?} = 19 \end{array}$$

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.

$$2\bigcirc + \blacksquare = 23$$

$$\blacktriangle \times \blacksquare = 126$$

$$2\blacklozenge + \text{⚡} = 29$$

3 CRACK THESE

$$1. \blacktriangle \times \blacklozenge + \bigcirc \times \text{⚡} = \square$$

$$2. \blacklozenge \times (\bigcirc - \blacklozenge) = \square$$

CODE 1

$$3. 10\blacklozenge - \blacktriangle = \square$$

$$4. 3\blacklozenge + 2\text{⚡} = \square$$

CODE 2

$$5. \text{⚡} \times \blacktriangle - \blacklozenge \times \blacklozenge = \square$$

$$6. \blacklozenge \times \bigcirc - \blacklozenge = \square$$

CODE 3

$$7. \blacklozenge + \bigcirc \times \blacksquare = \square$$

$$8. \blacktriangle \div 2 + \blacklozenge = \square$$

CODE 4

$$9. 10\blacklozenge - \blacksquare = \square$$

$$10. 3\blacklozenge + 2\blacksquare = \square$$

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 varsity team gear.

Answer Key

Championship Locker Code Breaker · Grade 5 Crack the Code

The key

 hexagon = 5 (hidden)
  ring = 7 (hidden)
  triangle = 14 (hidden)
  pentagon = 20
  square = 9
 lightning bolt = 19

Every symbol is a whole number from 1 to 20.

- | | | |
|-----|---|-----|
| 1. | $\triangle \times \text{pentagon} + \text{ring} \times \text{lightning bolt}$ (triangle x pentagon + ring x lightning bolt) | 413 |
| 2. | $\text{pentagon} \times (\text{ring} - \text{hexagon})$ (pentagon x (ring - hexagon)) | 40 |
| 3. | $10 \times \text{hexagon} - \text{triangle}$ (10 x hexagon - triangle) | 36 |
| 4. | $3 \times \text{hexagon} + 2 \times \text{lightning bolt}$ (3 x hexagon + 2 x lightning bolt) | 53 |
| 5. | $\text{lightning bolt} \times \text{triangle} - \text{hexagon} \times \text{pentagon}$ (lightning bolt x triangle - hexagon x pentagon) | 166 |
| 6. | $\text{pentagon} \times \text{ring} - \text{hexagon}$ (pentagon x ring - hexagon) | 135 |
| 7. | $\text{hexagon} + \text{ring} \times \text{square}$ (hexagon + ring x square) | 68 |
| 8. | $\text{triangle} \div 2 + \text{hexagon}$ (triangle / 2 + hexagon) | 12 |
| 9. | $10 \times \text{pentagon} - \text{square}$ (10 x pentagon - square) | 191 |
| 10. | $3 \times \text{hexagon} + 2 \times \text{square}$ (3 x hexagon + 2 x square) | 33 |

Vault code: **0 3 5 2**