

Championship Locker Math Puzzle

Solve the soccer-themed symbol equations to determine the value of each piece of gear and find the secret combination.

Name: _____ Date: _____

1 THE KEY

$$\begin{array}{ccccccc} \text{pentagon with ?} = & \square & \bullet = & 6 & \blacktriangle = & 20 & \blacklozenge = & 7 & \square \text{ with ?} = & \square & \heartsuit = & \square \end{array}$$

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.

$$\blacksquare - \blacklozenge = 11$$

$$\heartsuit \times \bullet = 48$$

$$\text{pentagon} \times \bullet = 78$$

3 CRACK THESE

$$1. \blacktriangle \times \text{pentagon} - \heartsuit = \square$$

$$2. \blacktriangle \times \bullet + \blacklozenge \times \text{pentagon} = \square$$

CODE 1

$$3. \blacktriangle \div 2 + \text{pentagon} = \square$$

$$4. 3\blacksquare + 2\text{pentagon} = \square$$

CODE 2

$$5. 3\heartsuit + 2\blacksquare = \square$$

$$6. \blacktriangle \times \blacklozenge - \heartsuit = \square$$

CODE 3

$$7. 10\heartsuit - \bullet = \square$$

$$8. \blacktriangle + \bullet \times \blacklozenge = \square$$

CODE 4

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

$$10. \blacktriangle \times \bullet + \blacklozenge \times \blacksquare = \square$$

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 captains gear locker.

Answer Key

Championship Locker Math Puzzle · Grade 5 Crack the Code

The key

 pentagon = **13** (hidden)
  circle = **6**
  triangle = **20**
  hexagon = **7**
  square = **18** (hidden)
 heart = **8** (hidden)

Every symbol is a whole number from 1 to 20.

1. $\triangle \times \text{pentagon} - \text{heart}$ (triangle x pentagon - heart) **252**
2. $\triangle \times \text{circle} + \text{hexagon} \times \text{pentagon}$ (triangle x circle + hexagon x pentagon) **211**
3. $\triangle \div 2 + \text{pentagon}$ (triangle / 2 + pentagon) **23**
4. $3 \square + 2 \text{pentagon}$ (3 x square + 2 x pentagon) **80**
5. $3 \text{heart} + 2 \square$ (3 x heart + 2 x square) **60**
6. $\triangle \times \text{hexagon} - \text{heart}$ (triangle x hexagon - heart) **132**
7. $10 \text{heart} - \text{circle}$ (10 x heart - circle) **74**
8. $\triangle + \text{circle} \times \text{hexagon}$ (triangle + circle x hexagon) **62**
9. $10 \triangle - \text{hexagon}$ (10 x triangle - hexagon) **193**
10. $\triangle \times \text{circle} + \text{hexagon} \times \square$ (triangle x circle + hexagon x square) **246**

Vault code: **1 0 2 2**