



Redstone Hoops Code Breaker

Determine the numerical values of the pixelated basketball items to solve the final equations and unlock the secret court chest.

Name: _____ Date: _____

1 THE KEY

$$\boxed{?} = \boxed{} \quad \blacklozenge = 4 \quad \text{☾} = \boxed{} \quad \text{⊙} = \boxed{} \quad \text{⊕} = 5 \quad \text{⚡} = 12$$

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.

$$2 \blacksquare + \text{⚡} = 48$$

$$\text{☾} \times \text{⊕} = 75$$

$$2 \bullet + \text{☾} = 49$$

3 CRACK THESE

$$1. \text{⊕} \times \blacksquare + \text{☾} \times \bullet = \boxed{}$$

$$2. 10 \blacklozenge - \bullet = \boxed{}$$

CODE 1

$$3. (\text{⊕} + \text{⚡}) \times \blacklozenge = \boxed{}$$

$$4. \text{☾} \times (\text{⚡} - \blacklozenge) = \boxed{}$$

CODE 2

$$5. \text{☾} + \text{⚡} \times \text{⊕} = \boxed{}$$

$$6. \text{⚡} + \blacklozenge \times \blacksquare = \boxed{}$$

CODE 3

$$7. (\blacklozenge + \text{⚡}) \times \bullet = \boxed{}$$

$$8. \text{⚡} \times \text{⊕} - \text{☾} = \boxed{}$$

CODE 4

$$9. 10 \text{⚡} - \text{☾} = \boxed{}$$

$$10. \text{☾} \times \text{⊕} + \blacklozenge \times \bullet = \boxed{}$$

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 redstone-locked ender chest.

Answer Key

Redstone Hoops Code Breaker · Grade 5 Crack the Code

The key

 square = **18** (hidden)
  diamond = **4**
  moon = **15** (hidden)
  circle = **17** (hidden)
  cross = **5**
 lightning bolt = **12**

Every symbol is a whole number from 1 to 20.

- | | | |
|-----|---|------------|
| 1. | $\text{+} \times \blacksquare + \text{☾} \times \bullet$ (cross x square + moon x circle) | 345 |
| 2. | $10 \blacklozenge - \bullet$ (10 x diamond - circle) | 23 |
| 3. | $(\text{+} + \text{⚡}) \times \blacklozenge$ ((cross + lightning bolt) x diamond) | 68 |
| 4. | $\text{☾} \times (\text{⚡} - \blacklozenge)$ (moon x (lightning bolt - diamond)) | 120 |
| 5. | $\text{☾} + \text{⚡} \times \text{+}$ (moon + lightning bolt x cross) | 75 |
| 6. | $\text{⚡} + \blacklozenge \times \blacksquare$ (lightning bolt + diamond x square) | 84 |
| 7. | $(\blacklozenge + \text{⚡}) \times \bullet$ ((diamond + lightning bolt) x circle) | 272 |
| 8. | $\text{⚡} \times \text{+} - \text{☾}$ (lightning bolt x cross - moon) | 45 |
| 9. | $10 \text{⚡} - \text{☾}$ (10 x lightning bolt - moon) | 105 |
| 10. | $\text{☾} \times \text{+} + \blacklozenge \times \bullet$ (moon x cross + diamond x circle) | 143 |

Vault code: **3 0 4 5**