

Mental Division Strategies

Name: _____

Date: _____

Part A: Halving Strategy

Divide by halving repeatedly (useful for dividing by 2, 4, 8, 16, etc.)

1. $96 \div 4 =$ _____

2. $144 \div 8 =$ _____

3. $320 \div 16 =$ _____

4. $240 \div 4 =$ _____

Part B: Partitioning Strategy

Break the dividend into parts that are easier to divide

5. $156 \div 6 = (120 \div 6) + (36 \div 6) =$ _____ $+$ _____ $=$ _____

6. $135 \div 5 = (100 \div 5) + (35 \div 5) =$ _____ $+$ _____ $=$ _____

7. $252 \div 7 = (210 \div 7) + (42 \div 7) =$ _____ $+$ _____ $=$ _____

8. $168 \div 8 = (160 \div 8) + (8 \div 8) =$ _____ $+$ _____ $=$ _____

Part C: Using Inverse Operations

Think: "What do I multiply by to get this number?"

9. $72 \div 9 =$ _____ ($9 \times$ ____ $= 72$)

10. $132 \div 11 =$ _____ ($11 \times$ ____ $= 132$)

11. $84 \div 12 =$ _____ ($12 \times$ ____ $= 84$)

12. $195 \div 15 =$ _____ ($15 \times$ ____ $= 195$)

Part D: Choose Your Strategy

Use any mental strategy to solve these problems. Show your thinking.

13. $216 \div 9 =$ _____

Strategy used: _____

14. $384 \div 8 =$ _____

Strategy used: _____

15. $285 \div 5 =$ _____

Strategy used: _____

16. $336 \div 12 =$ _____

Strategy used: _____

 **Remember:** Mental strategies help you divide quickly without a calculator. Choose the strategy that makes the most sense for each problem!