# Arithmetic Patterns

Grade 3 Math Worksheet - Challenge Me

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Name _____ Date _____

Circle the answer, or write the answer on the line.

1. On a hundred chart, start at 47. Move down one row, then two squares left. Where do you land?

   59 55 45 65

2. What rule fits this pattern?

   **2 6 18 54**

   add 4 each time

   multiply by 2 each time

   multiply by 3 each time

   add 12 each time

3. What are the next two numbers in this pattern?

   **3 7 11 15 19**

   22, 25

   23, 28

   21, 23

   23, 27

4. The digits of a 9s product add to 9. Which number could be in the 9s row?

   64 73 53 63

5. Which number goes in the empty box?

   **81 72 63 ☐ 45**

   64 55 52 54

6. A pattern starts at 100 and subtracts 7 each time. What is the fourth number?

   _____

7. A pattern starts at 3 and adds 4 each time. Why is every number odd?

   adding 4 makes any number odd

   odd plus even is always odd

   odd plus odd is always odd

   even plus even is always odd

8. Which number is in both the 4s row and the 6s row?

16 30 18 24

9. Kim says every product in the 6s row is even. Which reason proves it?

6 × 3 = 18, and 18 is even

6 is even, and an even factor makes an even product

every 6s product ends in 6

the other factor is always even

10. Without multiplying, how do you know 5 × 9 is odd?

one factor is even every 5s product ends in 5 5 + 9 is an even number

both factors are odd

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Answer Key - Grade 3 Math Worksheet - Challenge Me

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**79**

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