# Arithmetic Patterns

Grade 3 Math Worksheet

Name _____ Date _____

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

1. Each product in the 6s row is double a product in the 3s row. 3 × 7 = 21. What is 6 × 7?

_____

2. What is true about the product of two odd numbers?

it is always even  it is always odd  it always ends in 5  it can be even or odd

3. These numbers are from the 4s row of the multiplication table. What is true about them?

**24  28  32  36**

some are even and some are odd

they are all even

they all end in 4

they are all odd

4. Why is 4 times any number always even?

the product is always more than 10

it can always be split into two equal groups

the other factor is always even

it always ends in 4

5. These are products from the 9s row. Add the two digits of each number. What do you notice?

**18  27  36  45  54**

the digits always add to 10

the digits always add to 9

the digit sums go up by 1

the digits always add to 8

6. Look at 45, 54, 63 and 72 from the 9s row. How do the digits change?

tens go up 1, ones go down 1

tens go down 1, ones go up 1

tens stay the same, ones go down 1

tens go up 1, ones go up 1

7. In an addition table, what is true about the sums 1 + 9, 2 + 8 and 3 + 7?

they are all 10 they go up by 2 they are all odd they go up by 1

8. What rule fits this pattern?

**8 16 24 32 40**

add 6 each time multiply by 2 each time add 8 each time add 16 each time

9. What is true about the product of an even number and an odd number?

it is always even it can be even or odd it always ends in 0 it is always odd

10. On a hundred chart, which numbers are in the same column as 23?

22, 24, 25 13, 33, 43 20, 30, 40 32, 42, 52

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Answer Key - Grade 3 Math Worksheet

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

1. Each product in the 6s row is double a product in the 3s row. 3 × 7 = 21. What is 6 × 7?

   **42**

2. What is true about the product of two odd numbers?

   it is always even

   **it is always odd**

   it always ends in 5

   it can be even or odd

3. These numbers are from the 4s row of the multiplication table. What is true about them?

   **24 28 32 36**

   some are even and some are odd

   **they are all even**

   they all end in 4

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   **it can always be split into two equal groups**

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