

# Problems of the Day

## Unit 8: Patterns and Two-Step Problems

## 1.1: Number Patterns

In the table below, bubble whether the situation will produce an even or odd sum.

Addition Expression	Always Even	Always Odd	Sometimes Even, Sometimes Odd
Odd + Odd	<input type="radio"/> a	<input type="radio"/> b	<input type="radio"/> c
Even + Even	<input type="radio"/> a	<input type="radio"/> b	<input type="radio"/> c
Odd + Even	<input type="radio"/> a	<input type="radio"/> b	<input type="radio"/> c
Even + Even + Odd	<input type="radio"/> a	<input type="radio"/> b	<input type="radio"/> c

## 5.1: Describe Patterns

Complete the table below by filling in the empty cells.

Ants	Legs
5	40
6	48
7	56
8	
9	

Describe the pattern.

### 5.3: Use The Distributive Property

Select all the expressions that are equivalent to  $4 \times 30$ .

- $(4 \times 10) + (4 \times 10) + (4 \times 10)$
- $30 + 30 + 30 + 30$
- $(2 \times 30) + (2 \times 30)$
- $(4 \times 10) + (4 \times 20)$
- $(4 \times 10) + (4 \times 10)$

Write the product of  $4 \times 30$ . \_\_\_\_\_

MAFS.3.NBT.1.3

## 5.4/5.5: Multiplication Strategies with Multiples of 10

In Darwin's office there were 7 shelves of books. Each shelf contained 60 books. How many books does Darwin have?

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**GRIDDED RESPONSE**

MAFS.3.NBT.1.3

## Supplement: Multiply with Bigger Numbers

Select all that are equal to  $13 \times 5$ .

- 65
- $(10 \times 5) + (3 \times 5)$
- $(6 \times 5) + (7 \times 5)$
- $5 \times (10 + 3)$
- $13 \times (10 + 5)$
- $13 + 13 + 13 + 13$

## 7.10: Two-Step Problems

1) In Darwin's office there were **8 shelves of books**. Each shelf contained **50 books**. Darwin loaned **294 of his books** to the Palm Beach County Library. **How many books are left in Darwin's office?**

2) Sue has **3 packages of crayons**. Each package contains **24 crayons**. She wants to put the crayons in cups with **8 crayons in each cup**. How many cups will Sue fill?

**GRIDDED RESPONSE**

**MAFS.3.OA.4.8**

## Supplement: Write Equations for 2-step Problems

Solve each problem. Then, write an equation for the problem, using a letter for the unknown.

Ms. Davis bought 32 raffle tickets at the school fair. Ms. Robinson bought twice as many tickets as Ms. Davis. How many raffle tickets did they buy altogether?

Lulu gets fed three times each day. The amount of dog food she gets are listed in the table below.

Morning Meal	1 cup
Afternoon Meal	2 cups
Evening Meal	1 cup

How many cups of dog food does Lulu eat each week?

MAFS.3.OA.4.8