

Math 123-01  
 Summer 2025  
 Dr. Lily Yen

# Quiz 1

Show all your work

Name: \_\_\_\_\_  
 Number: \_\_\_\_\_  
 Signature: \_\_\_\_\_  
 Score: \_\_\_\_/10

**Problem 1:** In a safari zoo with zebras and ostriches (at least one of each), suppose you count a total of 26 legs, how many of each kind may be in the zoo? Make a table of values to cover all possible cases.

Ostriches:	1	3	5	7	9	11
Zebras:	6	5	4	3	2	1

From your table of values, which of the following numbers are possible for the total number of eyes? Circle all correct ones.

12,      16,      22,      28

Since we have 7 to 12 animals, the number of eyes could be all even numbers from 14 to 24, so 12 is too small and 28 is too big.

Score:    /4

**Problem 2:** Share a 2.4-metre fruit leather with a friend such that your friend gets 60 centimetre more than you.

$x + (x + 60) = 240$ , so  $2x + 60 = 240$ , so  $2x = 180$ , so  $x = 90$ . That it, you get 90 cm and your friend gets 150 cm.

Score:    /2

**Problem 3:** Solve the following  $4 \times 4$  Kenken puzzle.

1-		2÷	4+
2	1	4	3
7+			
4	3	2	1
2-	2	24×	
1	2	3	4
	5+		
3	4	1	2

Score:    /4