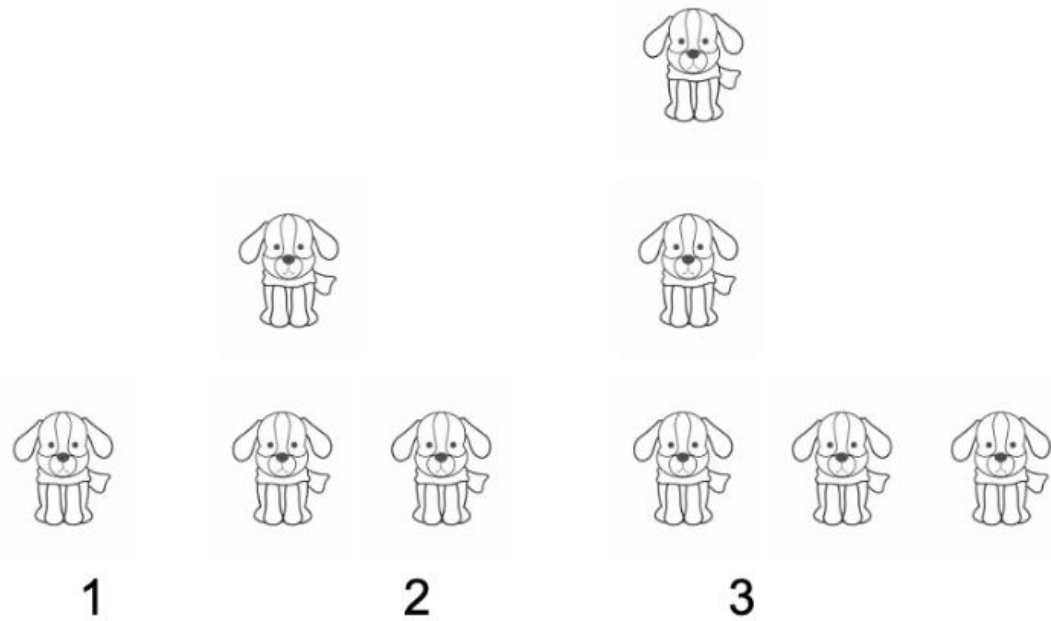




COASTMETRO
ELEMENTARY MATH PROJECT

GRADE 5 PRACTICE QUESTIONS
PATTERNS & ALGEBRA

1. How do you see the pattern growing? Describe the pattern in words.



2. Create a decreasing pattern. Draw the first 3 steps and write a pattern rule to describe the pattern.

3. Write a pattern rule to describe the following patterns. Classify each pattern as repeating, increasing or decreasing

a.

1	2
2	4
3	6
4	8

b. Clap, clap, stomp, clap, snap, clap, clap, stomp, clap, snap

c. 25, 20, 15, 10

4. A pattern contains the numbers 6 and 12. Build 3 different patterns that could contain these numbers. Write a pattern rule for each one.

5. Work with a partner. Take turns building different patterns. One partner builds a pattern and the other partner names the pattern rule, names the type of pattern (repeating, increasing, decreasing) and tells what comes next.

6. Fill in the missing numbers in the pattern.

4	5
	6
6	

6. Fill in the missing numbers in the pattern.

a.

50	100
40	80
30	

6. Fill in the missing numbers in the pattern.

b.

50	100
40	80
30	

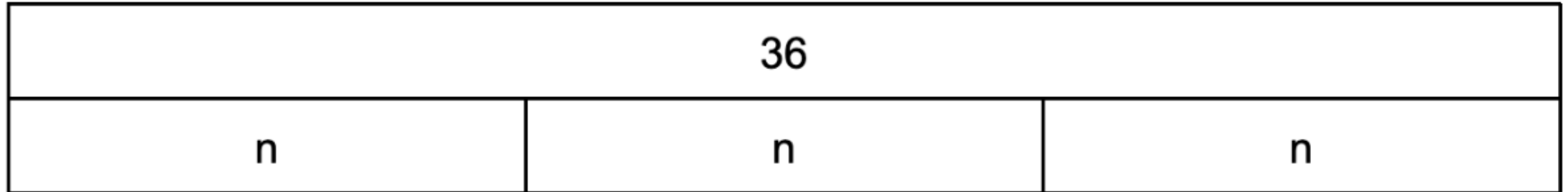
6. Fill in the missing numbers in the pattern.

c.

1	8
2	10
3	
4	
5	18

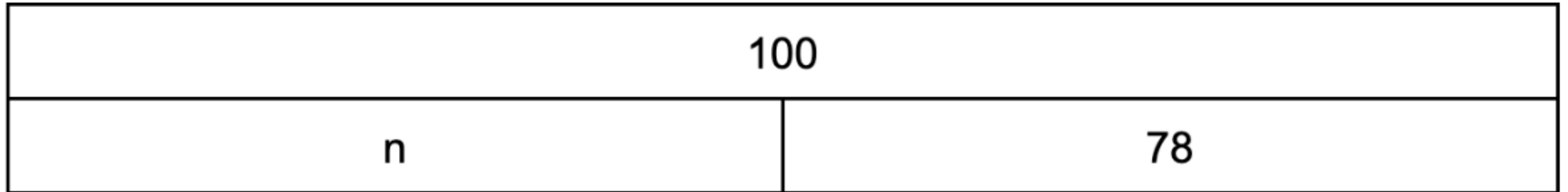
7. Write a word problem and an equation that represents the bar model.

a.



7. Write a word problem and an equation that represents the bar model.

b.



8. Solve.

a. $2 + n = 55$

b. $4n = 48$

c. $7 = n - 6$

d. $24 = n/3$

9. Mani needs to fill 24 baskets with apples. They fill 4 baskets on the first day, but only 2 baskets each day after that. How many days will it take Mani to fill the 24 baskets? Draw a picture and write an equation to represent the pattern.

10. Ella is saving money to buy a new bike. The bike costs \$100. Write an equation to show how Ella could save her money:
- If she saves the same amount each week.
 - If she saves \$2 more than the week before every week.