

Revision Chapter-6-Expressions and Patterns

Grade - 5

Student Name - _____



PEMDAS

Parentheses	→	()
Exponents	→	3^2
Multiplication and	→	$\times$
Division (from left to right)	→	$\div$
Addition and	→	$+$
Subtraction (from left to right)	→	$-$

Example :

Evaluate $\{5^3 \div [1 \times (10 - 5)]\} - 20$.

Write the expression.

$$\{5^3 \div [1 \times (10 - 5)]\} - 20 \quad \text{parentheses 1}^{\text{st}}$$

Subtract 5 from 10.

$$\{5^3 \div [1 \times 5]\} - 20 \quad \text{brackets 2}^{\text{nd}}$$

Multiply.

$$\{5^3 \div 5\} - 20$$

Find 5^3 .

$$\{125 \div 5\} - 20 \quad \text{braces 3}^{\text{rd}}$$

Divide.

$$25 - 20$$

Subtract.

$$5$$

Question 1:

Evaluate the expression $12 \times 4 + 10 \times 8$.

Write the expression.

$$12 \times 4 + 10 \times 8$$

Multiply 12 by 4.

$$\underline{\hspace{2cm}} + 10 \times 8$$

Multiply 10 by 8.

$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}}$$

Add.

$$\underline{\hspace{2cm}}$$

Question 2:

Evaluate $20 - [4 + [4 + (10 \div 2)]]$.

Write the expression.

$$\underline{\hspace{2cm}} - [4 + [\underline{\hspace{2cm}} + (10 \div \underline{\hspace{2cm}})]]$$

Divide 10 by 2.

$$20 - [4 + [4 + \underline{\hspace{2cm}}]]$$
 parentheses 1st

Add.

$$20 - [4 + \underline{\hspace{2cm}}]$$
 brackets 2nd

Add.

$$20 - \underline{\hspace{2cm}}$$
 braces 3rd

Subtract.

$$\underline{\hspace{2cm}}$$

Question 3:

Evaluate $\{28 + [(2 \times 4^2) \div 8]\}$.

Write the expression.

$$\{ \underline{\hspace{2cm}} + [(2 \times 4^2) \div \underline{\hspace{2cm}}] \}$$

Find 4^2 .

$$\{28 + [(2 \times \underline{\hspace{2cm}}) \div 8]\}$$

Multiply.

$$\{28 + [\underline{\hspace{2cm}} \div 8] \}$$
 parentheses 1st

Divide.

$$\{28 + \underline{\hspace{2cm}} \}$$
 brackets 2nd

Add.

$$\underline{\hspace{2cm}}$$
 braces 3rd

Question 4:

Evaluate $64 \div [4 \times (27 - 5^2)]$.

Write the expression.

$$\underline{\hspace{2cm}} \div [4 \times (\underline{\hspace{2cm}} - 5^2)]$$

Find 5^2 .

$$64 \div [4 \times (27 - \underline{\hspace{2cm}})]$$
 parentheses 1st

Subtract.

$$64 \div [4 \times \underline{\hspace{2cm}}]$$
 brackets 2nd

Multiply.

$$64 \div \underline{\hspace{2cm}}$$

Divide.

$$\underline{\hspace{2cm}}$$

Question 5:

Write each phrase as a numerical expression.

divide 15 by 3, then add 13 _____

subtract 4 from 20, then divide by 2 _____

add 9 and 4, then multiply by 2 _____

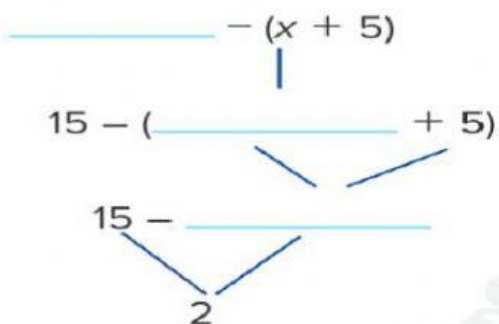
Question 6:

Humaid buys 3 containers of ice cream for AED 5 each and a cake that costs AED 8 to take to his friend's dinner party. Which expression will allow you to find how much money Humaid spent on ice cream and cake?

- (A) $\text{AED } 8 \times 3 \times \text{AED } 5$ (C) $(3 \times \text{AED } 8) + \text{AED } 5$
(B) $(3 \times \text{AED } 5) + \text{AED } 8$ (D) $3 \times (\text{AED } 5 + \text{AED } 8)$

Question 7:

Evaluate the expression $15 - (x + 5)$ if $x = 8$.



Write the expression.

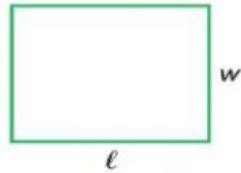
Replace x with 8.

Add 8 and 5.

Subtract 13 from 15.

Question 8:

 Problem Solving



To find the perimeter of a rectangle, you can use the expression $2(\ell) + 2(w)$.
Find the perimeter if $\ell = 10$ centimeters, and $w = 8$ centimeters.

Solution:

Question 9:

Evaluate each expression given the value of the variables.

$6 - m + 3 - n$, when $m = 4$
and $n = 1$ _____

$2 \times z$, when $z = 8$ _____

$k \div 5$, when $k = 30$ _____

Question 10:

Algebra Identify the pattern. Then write the next three terms in each sequence.

1. 5, 10, 20, 40, ...

2. 63, 58, 53, 48, ...

3. 192, 96, 48, 24, ...

4. 4, 11, 18, 25, ...

Question 11:

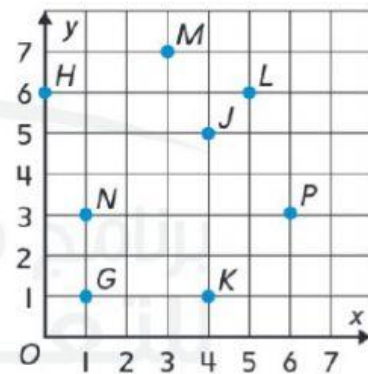
Use the graph for Exercises 1–6.

Locate and name each ordered pair.

1. M _____

2. P _____

3. J _____



Locate and name each point.

4. $(1, 3)$ _____

5. $(5, 6)$ _____

6. $(0, 6)$ _____

Que 12: Complete the table below:

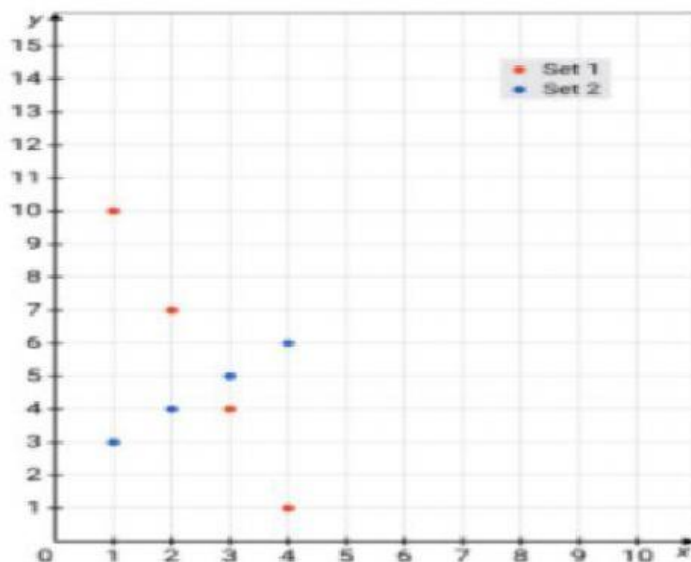
x	1	2	3	4
y	44	48	52	

Write the ordered pairs for the above table:

(1,), (2,), (3,), (4,)

Que 13: Look at the two sets of ordered pairs, **Set 1** & **Set 2**.

How do the patterns compare:



Select your answers from the drop-down menus to correctly complete the sentences.

In Set 1, as x increases, y

In Set 2, as x increases, y