



ASSIGNMENT-2

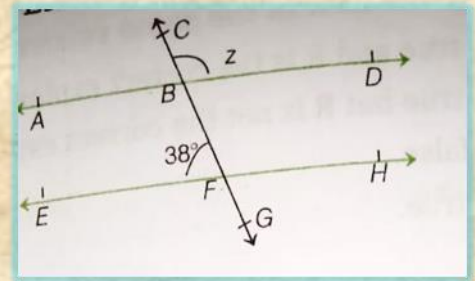
SUBJECT: MATHEMATICS

CLASS :VII

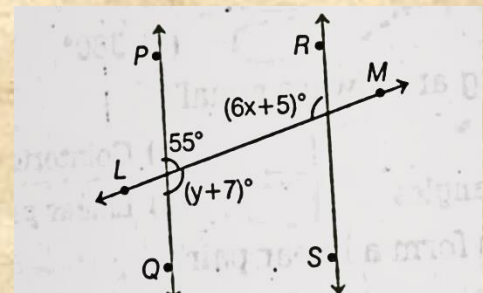
JULY 2026

CH-5 PARALLEL AND INTERSECTING LINES

Q1) In the given figure, $AD \parallel EH$ and CG is the transversal. Find the value of z .

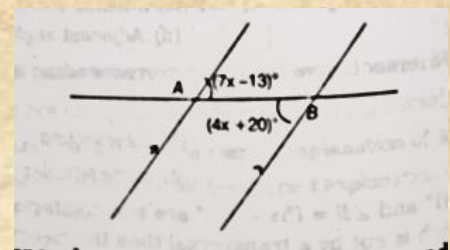


Q2) In the given figure, $PQ \parallel RS$ and LM is the transversal. Find the value of x and y .



Q3) If two angles form a linear pair and one is four times the other, find both angles.

Q4) In the given figure, find the value of x .

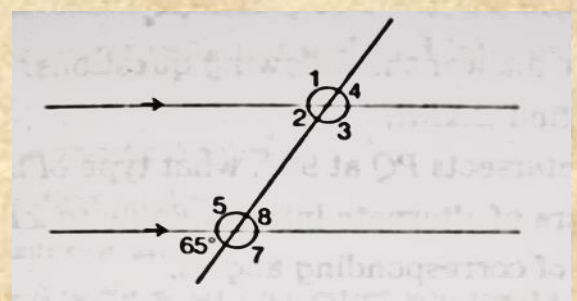


Q5) Construct two parallel lines using ruler and set-square. Draw a transversal. Label all eight angles and write all pairs of

- (a) corresponding angles
- (b) alternate interior angles
- (c) vertically opposite angles

Q6) Two parallel lines are cut by a transversal. One of the angles is 65° .

- (a) Identify all the angles equal to 65° .
- (b) Identify all the angles equal to 115° .
- (c) What is the sum of all eight angles formed?



CH-4 EXPRESSIONS USING LETTER-NUMBERS

Q1) Write an expression for 'twice the sum of x and 3'.

Q2) What is the simplified form of $5x+4-2x+6$?

Q3) Simplify $7p+3-2p-1+4p$

Q4) Evaluate $3(a+b)-(2a-b)$ when $a=2$, $b=5$

Q5) Meera sells handcrafted items over three weekends. Her earnings were $(3a-2b)$, $(6a+b)$ and $(5a-3b)$. Write and simplify an expression for her total earnings from all weekends.

Q6) A square tile costs ₹ x and a border tile costs ₹ y . Write expression for total cost of m square tiles and n border tiles. Find the cost, if $m=4$, $n=3$, $x=15$, $y=10$.

Q7) Rohan earned $(8m+5n)$ points in Game 1 but lost $(3m-2n)$ points due to a penalty and he earned $(4m+n)$ points in Game 2. Write and simplify an expression for his total points after both games and the penalties.

Q8) A shop charges a refundable deposit of ₹50 per helmet and ₹100 per jacket. At return, ₹8 is deducted for each helmet and ₹12 for each jacket as usage fee. Write and simplify an expression for the total refund if h helmets and j jackets are returned.

Q9) Add the following expressions

(a) $-19a+23b$ and $19a-23b$

(b) $5p-9q+14$ and $-3q+11+7p$

(c) $-4x+22-7y$ and $-13+9x+10y$

Q10) Subtract the following expressions

(a) $7a+12$ from $5a-20$

(b) $-18x+21-7y$ from $8y-16+5x$

(c) $13g+11-5h$ from $15-11g+4h$

ASSERTION AND REASONING BASED QUESTION

DIRECTION: In the question numbers 1 to 5, a statement of Assertion(A) is followed by a statement of Reason (R). Choose the correct option.

- (a) Both Assertion and Reason are true and Reason is a correct explanation of Assertion.
- (b) Both Assertion and Reason are true but Reason is not a correct explanation of Assertion.
- (c) Assertion is true and Reason is false
- (d) Assertion is false and Reason is true.

Q1) **Assertion (A):** The perimeter of square is given by $4s$, where s is the length of the side.

Reason (R): The perimeter of square is calculated by adding the length of all four sides, each of which is equal to s .

Q2) **Assertion (A):** In the expression, $y+2$, 2 is called a constant.

Reason (R): A constant is a fixed number added to or subtracted from a variable.

Q3) **Assertion (A):** Vertically opposite angles are never equal.

Reason (Ra): Vertically opposite angles are formed by two intersecting lines and lie opposite to each other.

Q4) **Assertion (A):** In $2a+b$, both a and b must have the same value.

Reason (R): Variables can take any value depending on the situation

Q 5) **Assertion (A):** Intersecting lines can make angles of 90° each.

Reason (R): All intersecting lines are perpendicular.