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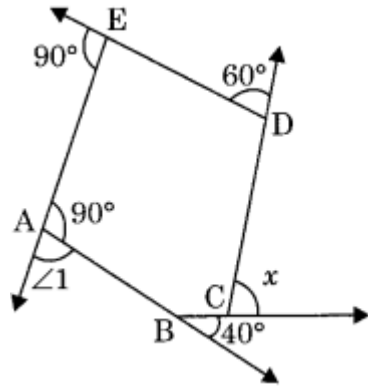
	INDIAN SCHOOL MUSCAT MIDDLE SECTION FIRST PERIODIC TEST 2022 – 23	
	MATHEMATICS (SET-A)	Code: MZM01
CLASS-VIII		Time Allotted: 40 Minutes
22.05.2022		Max. Marks: 20

General Instructions.
 1. The question paper comprises of **three sections A, B, and C**. You have to attempt all the sections.
 2. **All** the questions are **compulsory**.
 3. **All the answers should be written in the answer sheet provided.**

Q.NO1	<u>SECTION A - FILL IN THE BLANKS ('1' MARK EACH) – TOTAL – 04 MARKS</u>	Marks
(a)	There are <u>UNCOUNTABLE</u> rational numbers between $\frac{-2}{7}$ and $\frac{6}{7}$.	1
(b)	The sum of $\frac{5}{8}$ and its additive inverse is <u>0</u>	$\frac{1}{2} + \frac{1}{2}$
(c)	Measure of each exterior angle of 12-sided regular polygon = $360^\circ \div 12 = 30^\circ$	$\frac{1}{2} + \frac{1}{2}$
(d)	The sum of the interior angles of a nonagon = $(9 - 2) \times 180^\circ = 1260^\circ$	$\frac{1}{2} + \frac{1}{2}$

Q.NO2	<u>SECTION B – ('2' MARKS EACH) – TOTAL – 10 MARKS</u>	Marks
(a)	How many diagonals are there for a polygon with 13 sides? Number of diagonals = $13(13 - 3) / 2 = (13 \times 10) / 2 = 13 \times 5 = 65$	$\frac{1}{2} + \frac{1}{2}$ $+ \frac{1}{2} + \frac{1}{2}$
(b)	Find the number of sides for a regular polygon with each interior angle 160° . Measure of each exterior angle = $180^\circ - 160^\circ = 20^\circ$ Number of sides = $360^\circ \div 20^\circ = 18$	1 + 1
(c)	Find the multiplicative inverse of $(\frac{-7}{8} + \frac{5}{6})$. $(\frac{-7}{8} + \frac{5}{6})$. LCM= 24 = $(\frac{-21}{24} + \frac{20}{24}) = \frac{-1}{24}$. MULTIPLICATIVE INVERSE = - 24	1 + 1
(d)	The product of two rational numbers is $\frac{-9}{10}$. If one of the rational numbers is $(\frac{2}{5} \times \frac{3}{4})$ then find the other rational number.	$1 + \frac{1}{2}$ $+ \frac{1}{2}$

Ans: $\frac{-9}{10} \div \left(\frac{2}{5} \times \frac{3}{4}\right) = \frac{-9}{10} \div \frac{3}{10} = -3$



(e)

Find the value of 'x'.

Ans: $\angle 1 = 180^\circ - 90^\circ = 90^\circ$ (linear pair)

$90^\circ + 90^\circ + 40^\circ + 60^\circ + x = 360^\circ$ (Sum of the exterior angles of a polygon is 360°)

$280^\circ + x = 360^\circ$

$X = 360^\circ - 280^\circ = 80^\circ$

$\frac{1}{2} + \frac{1}{2}$
 $+\frac{1}{2} + \frac{1}{2}$

Q.NO	SECTION – C ('3' MARKS EACH) – TOTAL – 06 MARKS	Marks
3.	<p>Simplify $\frac{-3}{7} \times \frac{5}{12} + \frac{11}{12} \times \frac{-3}{7} - \frac{-3}{7}$ using suitable properties.</p> $\begin{aligned} & \frac{-3}{7} \times \left(\frac{5}{12} + \frac{11}{12} - 1\right) \\ &= \frac{-3}{7} \times \left(\frac{5}{12} + \frac{11}{12} - \frac{12}{12}\right) \\ &= \frac{-3}{7} \times \frac{4}{12} \\ &= \frac{-1}{7} \end{aligned}$	1 + 1+1
4.	<p>The angles of a pentagon are in the ratio 3 : 4 : 5 : 5 : 10. Find the largest and the smallest angles of the pentagon.</p> <p>Sum of the interior angles of a pentagon = $(5 - 2) \times 180^\circ = 540^\circ$ $3x + 4x + 5x + 5x + 10x = 540^\circ$ $27x = 540^\circ$ $X = 540^\circ \div 27 = 20^\circ$ Largest angle = $10x = 10 \times 20^\circ = 200^\circ$ The smallest angle = $3x = 3 \times 20^\circ = 60^\circ$</p>	1 + 1 + $\frac{1}{2} + \frac{1}{2}$

End of Answer Key.