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	INDIAN SCHOOL MUSCAT MIDDLE SECTION FIRST PERIODIC TEST 2022 – 23	
	MATHEMATICS (SET-B)	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.

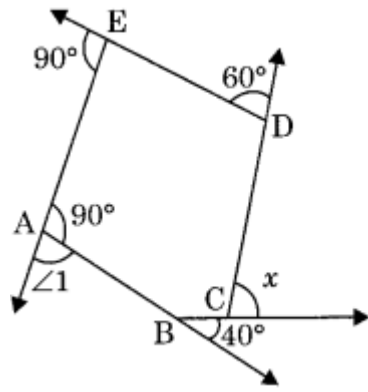
Q.NO1	<u>SECTION A - FILL IN THE BLANKS ('1' MARK EACH) – TOTAL – 04 MARKS</u>	Marks
(a)	There are UNCOUNTABLE rational numbers between $\frac{-3}{8}$ and $\frac{3}{4}$.	1
(b)	The sum of the interior angles of a polygon with 12 sides = $(12 - 2) \times 180^\circ = \mathbf{1800^\circ}$	$\frac{1}{2} + \frac{1}{2}$
(c)	Measure of each exterior angle of 20-sided regular polygon = $360^\circ \div 20 = \mathbf{18^\circ}$	$\frac{1}{2} + \frac{1}{2}$
(d)	The product of $\frac{-5}{11}$ and its multiplicative inverse is 1	$\frac{1}{2} + \frac{1}{2}$

Q.NO2	<u>SECTION B – ('2' MARKS EACH) – TOTAL – 10 MARKS</u>	Marks
(a)	Find the number of sides for a regular polygon with each interior angle 135° . Measure of each exterior angle = $180^\circ - 135^\circ = 45^\circ$ Number of sides = $360^\circ \div 45^\circ = 8$	1 + 1
(b)	How many diagonals are there for a polygon with 11 sides? Number of diagonals = $11(11 - 3) / 2 = (11 \times 8) / 2 = 11 \times 4 = 44$	$\frac{1}{2} + \frac{1}{2}$ $+ \frac{1}{2} + \frac{1}{2}$
(c)	Find the additive inverse of $\left(\frac{-7}{15} \times \frac{5}{14}\right)$. $\left(\frac{-7}{15} \times \frac{5}{14}\right) = \left(\frac{-1}{3} \times \frac{1}{2}\right) = \frac{-1}{6}$ ADDITIVE INVERSE OF $\frac{-1}{6}$ IS $\frac{1}{6}$	1 + 1
(d)	The product of two rational numbers is $\frac{-9}{10}$. If one of the rational numbers is $\left(\frac{2}{5} \times \frac{3}{4}\right)$ then find the other rational number.	

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

1 + 1/2 + 1/2

(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°)

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

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

1/2 + 1/2 + 1/2 + 1/2

Q.NO

SECTION – C ('3' MARKS EACH) – TOTAL – 06 MARKS

Marks

The angles of a pentagon are in the ratio 2 : 3 : 5 : 7 : 10. Find the largest and the smallest angles of the pentagon.

3.

of the interior angles of a pentagon = $(5 - 2) \times 180^\circ = 540^\circ$

$2x + 3x + 5x + 7x + 10x = 540^\circ$

$27x = 540^\circ$

$X = 540^\circ \div 27 = 20^\circ$

Largest angle = $10x = 10 \times 20^\circ = 200^\circ$

The smallest angle = $2x = 2 \times 20^\circ = 40^\circ$

1 + 1 + 1/2 + 1/2

Simplify $\frac{-3}{7} \times \frac{5}{12} + \frac{11}{12} \times \frac{-3}{7} - \frac{-3}{7}$ using suitable properties.

4.

$$\begin{aligned} & \frac{-3}{7} \times \left(\frac{5}{12} + \frac{11}{12} - 1\right) \\ &= \frac{-3}{7} \times \left(\frac{5}{12} + \frac{11}{12} - \frac{12}{12}\right) \\ &= \frac{-3}{7} \times \frac{4}{12} \\ &= \frac{-1}{7} \end{aligned}$$

1 + 1 + 1

End of Answer Key.