



**INDIAN SCHOOL MUSCAT
MIDDLE SECTION
HALF YEARLY EXAMINATION 2019 – 20**



SUBJECT – MATHEMATICS

Code: MXM13

CLASS 6

SET A - ANSWER KEY

Time Allotted: 2 ½ hrs.

05. 03. 2020

Max .Marks: 80

General Instructions.

1. The question paper comprises of four sections **A, B, C** and **D**. 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	SECTION 'A' – ('1' MARK EACH) – TOTAL – 20 MARKS	Marks
(a)	The successor of 2 09 999 is _____ a) 2 10 000 b) 2 09 910 c) 2 09 100 d) 2 09 998 Ans: 2 10 000 (a)	1
(b)	The decimal for 157 thousandths is _____ a) 1.57 b) 15.7 c) 0.157 d) 0.0157 Ans: 0.157 (c)	1
(c)	The perimeter of a regular hexagon is 48cm. The length of each of its side is _____ cm a) 42 b) 8 c) 288 d) 54 Ans: 8 (b)	1
(d)	The ratio of 15cm to 20cm is _____ a) 3 : 4 b) 4 : 3 c) 5 : 4 d) 3 : 5 Ans: 3 : 4 (a)	1
(e)	23 Kg 25 g = _____ Kg a) 23.250 b) 23.025 c) 23.205 d) 2.3025 Ans: 23.025 (b)	1
(f)	The product $4 \times 278 \times 25 =$ _____ Ans: $278 \times 100 = 27\ 800$ [1/2 + 1/2]	1
(g)	The expression for the statement "15 subtracted from 'm' " is _____ Ans: $m - 15$	1
(h)	The mixed fraction for $2\frac{5}{7}$ is _____ Ans: $\frac{19}{7}$	1
(i)	Of the 2 integers (– 19) and (– 91) _____ lies on the left. Ans: (– 91)	1
(j)	The area of a square of each side 9 cm is _____ Ans: $9 \times 9 = 81$ sq. cm [1/2 + 1/2]	1
(k)	Radha is 'y' years old now. Her age after 8 years will be _____ years. Ans: $y + 8$	1
(l)	The length of rope required to fence a park 10 m long and 8 m wide is _____ Ans: $2 \times 18 = 36$m [1/2 + 1/2]	1
(m)	What fraction of a litre is 700ml? Ans: $700 / 1000 = 7 / 10$ [1/2 + 1/2]	1
(n)	The additive inverse of (– 47) is _____. Ans: + 47	1
(o)	Out of 40 students in a class, 25 students are boys. The ratio of number of boys to the total number of students is _____. Ans: $25 : 40 = 5 : 8$ [1/2 + 1/2]	1
(p)	In the given data of marks scored by 15 students which is as follows: 10, 9, 9, 8, 5, 7, 7, 9, 9, 10, 8, 8, 9, 6, 6, the frequency of '9' is _____. Ans: 5	1
(q)	Fill in the blanks: $\frac{28}{35} = \frac{4}{\quad} = \frac{\quad}{45}$ Ans: Dr. = 5 ; Nr. = 36 [1/2 + 1/2]	1
(r)	$(- 31) + (- 10) =$ _____ Ans: (– 41)	1

Q.NO1	SECTION 'A' – ('1' MARK EACH) – TOTAL – 20 MARKS	Marks
(s)	5 : 10 :: 4 : 8 is _____ [True or False] Ans: 1 : 2 = 1 : 2 OR 40 = 40 [1/2 + 1/2]	1
(t)	For a pictograph on flowers, if one symbol of $\Delta = 5$ flowers, then _____ symbols will represent 100 flowers. Ans: 20 symbols	1

Q.NO	SECTION 'B' – ('2' MARKS EACH) – TOTAL – 12 MARKS	Marks
(2)	Add using number line: $(-7) + (-5)$ Ans: Correct number line with zero marked [1] Answer = (-12) [1]	2
(3)	The cost of a chair is Rs 'c' and the cost of a table is Rs 't'. Express the total cost of 6 chairs and 10 tables algebraically. Ans: Cost of 6 Chairs = $6c$; Cost of 10 tables = $10t$; Total Cost = $6c + 10t$ [1/2 + 1/2 + 1]	2
(4)	A table cloth 9m long and 7m wide has to be stitched with 2 rounds of border. Find the length of the border required. Ans: Length of border required for 2 rounds = $2 \times \text{Perimeter}$ $= 2 \times 2 \times [9 + 7] = 4 \times 16 = 64\text{m}$ [1/2 x 4]	2
(5)	Construct angle $ABC = 120^\circ$ Ans: Base ray [1/2] ; 3 arcs [1] ; Completing and label ... [1/2]	2
(6)	Armaan divides Rs1200 as gift for his two children in the ratio 5 : 3. Find the amount each one gets. Ans: Share of 1 st child = $5 / 8 \times 1200 = 5 \times 150 = \text{Rs}750$ [1] Share of 2 nd child = $3 / 8 \times 1200 = 3 \times 150 = \text{Rs}450$ [1]	2
(7)	The number of children in 25 families of a colony is as given below: 2, 1, 2, 4, 2, 1, 3, 3, 1, 4, 2, 3, 4, 3, 1, 1, 1, 2, 2, 2, 2, 2, 1, 4, 4 Make a table and enter the data using tally marks. Ans: Each Frequency [1/2]	2

No. of Children	1	2	3	4
Frequency	7	9	4	5
Total				25

Q.NO	SECTION 'C' – ('3' MARKS EACH) – TOTAL – 24 MARKS	Marks
(8)	Find using Distributive Property: $175 \times 28 + 175 \times 71 + 175$ Ans: $= 175 \times 28 + 175 \times 71 + 175 \times 1$ [1/2] $= 175 \times [28 + 71 + 1] = 175 \times 100 = 17\,500$ [1 + 1 + 1/2]	3
(9)	Find: a) $2\frac{3}{4} + \frac{7}{8}$ b) $6 - 1\frac{1}{3}$ Ans: $= 11/4 + 7/8$ [1/2] $= 6 - 4/3$ [1/2] $= (22+7)/8$ [1/2] $= (18 - 4)/3$ [1/2] $= 29/8 = 3\frac{5}{8}$ [1/2] $= 14/3 = 4\frac{2}{3}$ [1/2]	3
(10)	(a) Find: $(-48) + 119$ Ans: $= +71$ [1] (b) Subtract (-59) from (-99) $= (-99) - (-59)$ [1] $= (-99) + 59 = (-40)$ [1/2 + 1/2]	3

Q.NO	SECTION 'C' – ('3' MARKS EACH) – TOTAL – 24 MARKS	Marks
(11)	<p>Ankita bought 5Kg 75g of fruits, 3Kg 475g of vegetables and some pulses. If the total weight of the things she bought is 10Kg, find the weight of pulses. Express your answer in decimals.</p> <p>Ans: Statements [1/2] 5Kg 075g + 3Kg 475g = 8Kg 550g [1]</p> <p>10Kg 000g – 8Kg 550g = 1Kg 450g [1] = 1.450Kg of Pulses [1/2] Either all values can be converted to decimal and calculate or only the final Ans can be converted to decimal.</p>	3
(12)	<p>“The sum of Twice a number ‘x’ and 9 is 19”. Write an equation for the given statement and check if ‘x’ = 6 is the solution for that equation.</p> <p>Ans: Equation $2x + 9 = 19$ [1] For x = 6: LHS = $2x + 9 = 2 \times 6 + 9 = 12 + 9 = 21 \neq$ RHS [1 1/2] Hence x = 6 is NOT the solution. [1/2]</p>	3
(13)	<p>A granite tile measures 12cm long and 10cm wide. How many tiles will be required to cover a floor 4m long and 3m broad?</p> <p>Ans: 4m = 400cm ; 3m = 300cm [1] No. of tiles required = $[400 \times 300] \div [12 \times 10]$ [1/2] + [1] for cancelling = 1,000 tiles [1/2]</p>	3
(14)	<p>Draw Seg. AB = 9cm and construct its perpendicular bisector.</p> <p>Ans: Drawing Seg. AB = 9cm using compasses [1] Constructing perpendicular bisector [1 1/2] Labeling [1/2]</p>	3
(15)	<p>Shanta bought 72Kg of wheat for Rs324. How much wheat can she buy for Rs144?</p> <p>Ans: $x : 72 :: 144 : 324$ [1] $x = [144 \times 72] \div 324 = 32\text{Kg of Wheat}$ [1 1/2 + 1/2]</p>	3

Q.NO	SECTION 'D' – ('4' MARKS EACH) – TOTAL – 24 MARKS	Marks
(16)	<p>Simplify: $(- 500) - (- 380) + (- 222) + 620$</p> <p>Ans: = - 500 + 380 - 222 + 620 [1] = - 722 + 1000 [1 + 1] = + 278 [1]</p>	4
(17)	<p>a) Add using suitable rearrangement: $501 + 388 + 499 + 112$</p> <p>Ans: = 501 + 499 + 388 + 112 Rearranging [1/2] = 1000 + 500 [1/2 + 1/2] = 1500 [1/2]</p> <p>b) Find the product using suitable rearrangement: $16 \times 4 \times 5 \times 25$</p> <p>Ans: = 16 \times 5 \times 4 \times 25 Rearranging [1/2] = 80 \times 100 [1/2 + 1/2] = 8000 [1/2]</p>	4
(18)	<p>A square plot of each side 10m has a pool 8m long and 7m wide in it.</p> <p>a. Find the area of the remaining plot.</p> <p>Ans: Area of the remaining plot = $[10 \times 10] - [8 \times 7]$ [1] = 100 - 56 [1] = 44 sq. m [1]</p> <p>b. Find the cost of tiling the remaining area at the rate of Rs20 per sq. m.</p> <p>Ans: Cost of tiling the remaining area = $44 \times 20 = \text{Rs}880$ [1/2 + 1/2]</p>	4

Q.NO	SECTION 'D' – ('4' MARKS EACH) – TOTAL – 24 MARKS	Marks																
(19)	<p>Amit earns Rs40 000 a month. He spends Rs8 000 on rent, Rs15 000 on food and Rs6 000 on other expenses. Find the following ratios:</p> <p>a. Amt. spent on food to Amt. spent on rent Ans: = 15000 : 8000 = 15 : 8 [1/2 + 1/2]</p> <p>b. His income to the Amt. spent on other expenses Ans: = 40000 : 6000 = 40 : 6 = 20 : 3 [1/2 + 1/2]</p> <p>c. His income to his savings Ans: His Savings = 40000 – [8000 + 15000 + 6000] = 40000 – 29000 = 11000 [1] Ratio = 40000 : 11000 = 40 : 11 [1/2 + 1/2]</p>	4																
(20)	<p>Draw Seg. PQ = 5cm and Seg. RS = 4.5cm. Construct Seg. MN = 2PQ – RS</p> <p>Ans: Drawing Seg. PQ = 5cm and Seg. RS = 4.5cm [1 + 1] Constructing 2PQ – RS [1 + 1/2] Labeling [1/2]</p>	4																
(21)	<p>The following table shows the number of pastries sold by a bakery during the 7 days of a particular week:</p> <table border="1" data-bbox="318 747 1317 879"> <thead> <tr> <th>Day</th> <th>Mon</th> <th>Tues</th> <th>Wed</th> <th>Thurs</th> <th>Fri</th> <th>Sat</th> <th>Sun</th> </tr> </thead> <tbody> <tr> <td>No. of Pastries sold</td> <td>80</td> <td>65</td> <td>70</td> <td>50</td> <td>60</td> <td>90</td> <td>100</td> </tr> </tbody> </table> <p>Represent the above information by a bar-graph, taking scale of 1 unit = 10 pastries. Ans: Given scale 1 unit = 10 pastries Marked correctly [1/2] Each Bar drawn correctly [1/2 x 7]</p>	Day	Mon	Tues	Wed	Thurs	Fri	Sat	Sun	No. of Pastries sold	80	65	70	50	60	90	100	4
Day	Mon	Tues	Wed	Thurs	Fri	Sat	Sun											
No. of Pastries sold	80	65	70	50	60	90	100											