



## **Bahrain Mental Math Olympiad 2025**

**GrandMaster Category (Age : 12 years & above)**

### **Practice Sheet 4- Answer Key**

#### **Section 1**

- 1)  $6 + 7 + 5 = \mathbf{18}$
- 2)  $22 + 8 + 3 = \mathbf{33}$
- 3)  $13 + 4 + 9 = \mathbf{26}$
- 4)  $45 - 7 + 8 = \mathbf{46}$
- 5)  $84 - 6 - 12 = \mathbf{66}$

#### **Section 2**

- 1) Double of 18 = **36**
- 2) Double of 6 = **12**
- 3) Double of 27 = **54**
- 4) Double of 13 = **26**
- 5) Double of 42 = **84**



### Section 3

- 1) Triple of 17 = **51**
- 2) Triple of 22 = **66**
- 3) Triple of 29 = **87**
- 4) Triple of 31 = **93**
- 5) Triple of 46 = **138**



## Section 4

1)  $66 + 5 + 4 = \mathbf{75}$

2)  $79 + 6 + 3 = \mathbf{88}$

3)  $82 + 8 + 7 = \mathbf{97}$

4)  $35 + 5 + 6 = \mathbf{46}$

5)  $82 + 9 = \mathbf{91}$

6)  $29 + 6 = \mathbf{35}$

7)  $72 + 9 = \mathbf{81}$

8)  $76 - 44 - 10 = \mathbf{22}$

9)  $52 - 21 - 11 = \mathbf{20}$

10)  $76 - 42 - 12 = \mathbf{22}$



## Section 5

- 1) Double of 309 = **618**
- 2) Double of 178 = **356**
- 3) Double of 701 = **1402**
- 4) Double of 444 = **888**
- 5) Double of 600 = **1200**

## Section 6

- 1) Half of 250 = **125**
- 2) Half of 420 = **210**
- 3) Half of 550 = **275**
- 4) Half of 722 = **361**
- 5) Half of 820 = **410**



## Section 7

- 1) Triple of 117 = **351**
- 2) Triple of 198 = **594**
- 3) Triple of 281 = **843**
- 4) Triple of 355 = **1065**
- 5) Triple of 420 = **1260**

## Section 8

- 1) Selling Price = 530, Cost Price = 370, Profit = **160**
- 2) Selling Price = 783, Cost Price = 475, Profit = **308**
- 3) Selling Price = 290, Cost Price = 210, Profit = **80**
- 4) Cost Price = 380, Selling Price = 340, Loss = **40**
- 5) Cost Price = 642, Selling Price = 480, Loss = **162**



## Section 9

1)  $12 \times 7 = \mathbf{84}$

2)  $9 \times 5 = \mathbf{45}$

3)  $16 \times 3 = \mathbf{48}$

4)  $25 \times 8 = \mathbf{200}$

5)  $6 \times 18 = \mathbf{108}$

6)  $11 \times 4 \times 3 = \mathbf{132}$

7)  $20 \times 2 \times 2 = \mathbf{80}$

8)  $7 \times 7 \times 7 = \mathbf{343}$

9)  $14 \times 12 = \mathbf{168}$

10)  $22 \times 9 = \mathbf{198}$



## Section 10

- 1) Double of 20 + Half of 56 = **68**
- 2) Half of 200 - Double of 45 = **10**
- 3) Double of 84 + Half of 64 = **200**
- 4) Half of 120 - Double of 23 = **14**
- 5) Double of 67 + Half of 84 = **176**

## Section 11

### Squaring Numbers

- 1)  $13^2 = \mathbf{169}$
- 2)  $20^2 = \mathbf{400}$
- 3)  $25^2 = \mathbf{625}$
- 4)  $37^2 = \mathbf{1369}$
- 5)  $45^2 = \mathbf{2025}$



## Section 12

- 1)  $268 + 36 = \mathbf{304}$
- 2)  $570 - 35 = \mathbf{535}$
- 3)  $413 + 26 - 7 = \mathbf{432}$
- 4)  $725 - 62 + 15 = \mathbf{678}$
- 5)  $882 + 38 - 28 = \mathbf{892}$
- 6)  $496 - 32 + 5 = \mathbf{469}$
- 7)  $634 - 57 - 11 = \mathbf{566}$
- 8)  $287 + 38 - 9 = \mathbf{316}$
- 9)  $925 - 85 - 29 = \mathbf{811}$
- 10)  $754 + 37 - 42 = \mathbf{749}$



## Section 13

a.  $187 + 258 = \mathbf{445}$

b.  $532 + 349 = \mathbf{881}$

c.  $416 + 191 = \mathbf{607}$

d.  $625 + 389 = \mathbf{1014}$

e.  $1872 + 1298 = \mathbf{3170}$



## Section 14

- 1)  $64 / 8$  Quotient = **8**
- 2)  $135 / 9$  Quotient = **15**
- 3)  $264 / 6$  Quotient = **44**
- 4)  $420 / 10$  Quotient = **42**
- 5)  $810 / 9$  Quotient = **90**
- 6)  $375 / 25$  Quotient = **15**
- 7)  $47 / 6$  Remainder = **5**
- 8)  $67 / 8$  Remainder = **3**
- 9)  $339 / 12$  Remainder = **3**
- 10)  $549 / 25$  Remainder = **24**



## Section 15

11)  $72:9 = \mathbf{8:1}$

12)  $50:200 = \mathbf{1:4}$

13)  $36:324 = \mathbf{1:9}$

14)  $90:630 = \mathbf{1:7}$

15)  $150:15 = \mathbf{10:1}$

## Section 16

1)  $44 \times 10 = \mathbf{440}$

2)  $55 \times 10 = \mathbf{550}$

3)  $78 \times 100 = \mathbf{7800}$

4)  $7862 \times 100 = \mathbf{786200}$

5)  $5656 \times 0 = \mathbf{0}$



## Section 17

- 1)  $0.8 \times 100 = \mathbf{80}$
- 2)  $1.25 \times 100 = \mathbf{125}$
- 3)  $6.7 \times 10 = \mathbf{67}$
- 4)  $12.8 \times 1000 = \mathbf{12800}$
- 5)  $0.03 \times 1000 = \mathbf{30}$

## Section 18

- 1)  $0.82 / 1000 = \mathbf{0.00082}$
- 2)  $7.5 / 100 = \mathbf{0.075}$
- 3)  $2.5 / 1000 = \mathbf{0.0025}$
- 4)  $0.65 / 100 = \mathbf{0.0065}$
- 5)  $5.36 / 1000 = \mathbf{0.00536}$



## Section 19

- 1) 25, 50, 75 Mean = **50**
- 2) 18, 25, 41 Mean = **28**
- 3) 10, 20, 30, 40, 50 Mean = **30**
- 4) 15, 25, 35, 45, 55 Mean = **35**
- 5) 80, 70, 60, 50 Mean = **65**

## Section 20

- 1) 8% of 250 = **20**
- 2) 25% of 1200 = **300**
- 3) 60% of 90 = **54**
- 4) 12% of 5000 = **600**
- 5) 40% of 625 = **250**



## Section 21

- 1) Find the HCF of 56, 84 = **28**
- 2) Find the HCF of 63, 81 = **9**
- 3) Find the LCM of 30, 45 = **90**
- 4) Find the LCM of 16, 28 = **112**
- 5) Find the LCM of 72, 90 = **360**

## Section 22

- 1)  $185 \times 224 = \mathbf{41440}$
- 2)  $279 \times 148 = \mathbf{41292}$
- 3)  $478 \times 133 = \mathbf{63574}$
- 4)  $731 \times 217 = \mathbf{158627}$
- 5)  $1456 \times 898 = \mathbf{1307488}$



## Section 23

- 1) Prime Factors of 72 = **2,2,2,3,3**
- 2) Prime Factors of 120 = **2,2,2,3,5**
- 3) Prime Factors of 90 = **2,3,3,5**
- 4) Prime Factors of 84 = **2,2,3,7**
- 5) Prime Factors of 168 = **2,2,2,3,7**

## Section 24

### Square Root -Perfect Square

- 1)  $\sqrt{1764} = \mathbf{42}$
- 2)  $\sqrt{3249} = \mathbf{57}$
- 3)  $\sqrt{1369} = \mathbf{37}$
- 4)  $\sqrt{2116} = \mathbf{46}$
- 5)  $\sqrt{6084} = \mathbf{78}$



## Section 25

### Cube Root

$$1) \sqrt[3]{1728} = 12$$

$$2) \sqrt[3]{46656} = 36$$

$$3) \sqrt[3]{438976} = 76$$

$$4) \sqrt[3]{729000} = 90$$

$$5) \sqrt[3]{110592} = 48$$