Q:1 Study the given pattern carefully and select the number that can replace the question mark (?) in it.

2	21	48
4	29	52
3	32	1024
5	577	?

1. 1374
2. 1375
3. 1472
4. 1367

Q:2 Find the missing number in the given matrix.

17	54	38
23	31	26
30	51	?

1. 47
2. 63
3. 50
4. 56

Q:3 Study the given pattern carefully and select the number that can replace the question mark (?) in it.

28	30	36
36	32	18
252	240	?

1. 268
2. 164
3. 166
4. 162

Q:4 In the following question, select the number which can be placed at the sign of question mark (?) from the given alternatives.

28	42	98
18	49	28
21	84	14
252	588	?

1. 196
2. 248
3. 284
4. 343

Q:5 Study the given pattern carefully and select the number that can replace the question mark (?) in it.

1. 2519
2. 755
3. 1655
4. 1925

Q:6 Study the given pattern carefully and select the number that can replace the question mark (?) in it.

7	9	8
97	73	64
6	7	?
55	10	48

1. 2
2. 5
3. 4
4. 3

Q:7 Which of the following options will replace the question mark?

1. 6
2. 8
3. 2
4. 4

Q:8 Find the missing number in the given matrix.

54	25	29
142	72	70
287	128	?

1. 59
2. 259
3. 159
4. 519

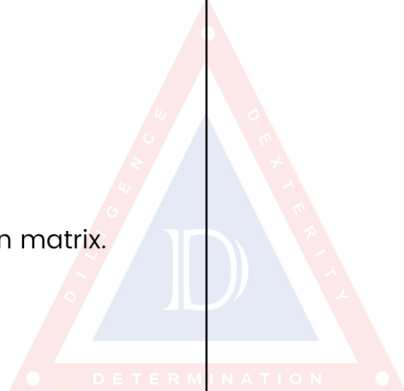**Q:9** Study the given pattern carefully and select the number that can replace the question mark (?) in it.

7	11	14
53	127	?
4	6	3

1. 196
2. 169
3. 200
4. 199

Q:10 Find the missing number in the given matrix.

242	121	363
162	81	243
?	95	285

1. 195
2. 190
3. 200
4. 105

Answer Key

1. (3)	**2.** (3)	**3.** (4)	**4.** (1)	**5.** (4)
6. (1)	**7.** (3)	**8.** (3)	**9.** (4)	**10.** (2)

Answer and solutions

Q:1 The correct answer is **Option 3** i.e **1472**
The logic used here is:
1st column:
$(2 × 4) - 3 = 5$
2nd column:
$(21 × 29) - 32 = 577$
Similarly,
3rd column:
$(48 × 52) - 1024 = 1472$
Hence, **1472** is the odd one out

Q:2 The correct answer is **Option 3** i.e. **50**
In each column: digits of the number at row 1 are multiplied and then added to the number at row 2
$(1 × 7) + 23 = 7 + 23 = 30$
$(5 × 4) + 31 = 20 + 31 = 51$
$(3 × 8) + 26 = 24 + 26 = 50$
Hence, the correct answer is **50.**

Q:3 The correct answer is **Option 4** i.e. **162**.
In the first column:
$(28 × 36) ÷ 4 = 1008 ÷ 4 = 252$
In 2nd column:
$(30 × 32) ÷ 4 = 960 ÷ 4 = 240$
In the third column:
$(36 × 18) ÷ 4 = 648 ÷ 4 = 162$
Hence **162** is correct.

Q:4 The correct answer is **Option 1** i.e. **196**
In the first column-
L.C.M. of 28, 18 and 21 = 252
In the second column-
L.C.M. of 42, 49 and 84 = 588
Similarly, L.C.M. of 98, 28 and 14 = **196**

Q:5 The correct answer is **Option 4** i.e. **1925**

Understanding	Application
The logic used here is: 1st figure: G = 7, Y = 25 i.e , 725 2nd figure: I = 9, H = 8 i.e, 98	Similarly, 3rd figure: S = 19, Y = 25 i.e, ? = 1925 Hence, 1925 is the correct answer.

Q:6 The correct option is **Option 1** i.e **2**

Understanding
The pattern followed here is, $97 - 7 × 6 = 97 - 42 = 55$ $73 - 9 × 7 = 73 - 63 = 10$ So, $64 - 8 × ? = 48$ $⇒ 8 × ? = 16$ $⇒ ? = 2$ Hence, the correct answer is **2**.

Q:7 The correct answer is **Option 3** i.e. **2**

Understanding	Application
The logic used here is: 1st triangle: 12 + 13 + 25 = 50 2nd triangle: 7 + 6 + 13 = 26	Similarly, 3rd triangle: 8 + ? + 10 = 20 ? = 20 - 18 =2 Hence, 2 is the correct answer.

Q:8 The correct answer is **Option 3** i.e. **159**

3

Understanding
In each row, the difference of the numbers of the first and the third cell is written in the second cell. First row → 54 - 29 = 25 Second row → 142 - 70 = 72
Application
Third row → 287 - 128 = **159**

Q:9 The correct answer is **Option 4** i.e **199**

Understanding	Application
The logic used here is; In the first column: $7^2 + 4 = 49 + 4 = 53$ In the second column: $11^2 + 6 = 121 + 6 = 127$	Similarly; In the third column: $14^2 + 3 = 196 + 3 = 199$ Hence **199** is correct.

Q:10 The correct answer is **Option 2** i.e. **190**

In each row, the number written in the first and the third cell is twice and thrice the number written in the second cell respectively.

121 × 2 = 242, 121 × 3 = 363

81 × 2 = 162, 81 × 3 = 243

95 **× 2 = 190**, 95 × 3 = 285

Thus, **190** is correct