



Date : 16th Dec 2023

Quantitative Aptitude – Simplification

English

Q:1 What will come in place of question mark (?) in the following question?

$$5\% \text{ of } 5^2 \times 12^2 - 140 = 2 \times ?$$

1. 15
2. 25
3. 22
5. 24

Q:2 What will come in place of question mark (?) in the following question?

$$(\text{?} - 2) \div 0.4 = 165 \div 3$$

1. 20
2. 30
3. 24
5. 25

Q:3 What will come in place of question mark (?) in the following question?

$$[9/4 + 4] \times 8 = ? \times 10$$

1. 10
2. 8
3. 6
5. 4

Q:4 What will come in place of question mark (?) in the following question?

$$22.5 \div 2.5 \times 8 - 12 = ?$$

1. 100
2. 80
3. 40
5. 60

Q:5 What will come in place of question mark (?) in the following question?

$$24 \times ? = 20 \times 5 \times 6$$

1. 20
2. 25
3. 18
5. 28

Q:6 What will come in place of question mark (?) in the following question?

$$14 \times 627 \div \sqrt{1089} = (\text{?})^3 + 141$$

1. 5
2. 10
3. 15

5. 25

Q:7 What will come in place of question mark (?) in the following question?

$$27 - [16^2 - (273 + 281) \div 2] = ?$$

1. 48
2. 50
3. 52
5. 44

Q:8 What will come in place of question mark (?) in the following question?

$$2.25\% \text{ of } (80\% \text{ of } 800) - 1.5\% \text{ of } (60\% \text{ of } 800) = ?$$

1. 7
2. 7.2
3. 7.4
5. 7.8

Q:9 Directions: What will come in place of question mark (?) in the following question?

$$4.5 + 23.50 + 14.58 - 17.68 \times 0.5 = ?$$

1. 33.14
2. 33.34
3. 33.54
5. 33.94

Q:10 Directions: What will come in place of question mark (?) in the following question?

$$\{(7.29 \times 2.7) \div 1000\} \times 10^3 = (\text{?})^3 \times 10^{-3}$$

1. 3^3
2. 3^2
3. 3^1
5. 0

Answer Key

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

Answers and Solutions

Q:1 The correct answer is **option 4** i.e. **20**.

$$5\% \text{ of } 5^2 \times 12^2 - 140 = 2 \times ?$$

Applying the BODMAS rule,

$$\Rightarrow 0.05 \times 25 \times 144 - 140 = 2 \times ?$$

$$\Rightarrow 1.25 \times 144 - 140 = 2 \times ?$$

$$\Rightarrow 180 - 140 = 2 \times ?$$

$$\Rightarrow 40 = 2 \times ?$$

$$\Rightarrow ? = 20$$

Q:2 The correct answer is **option 3** i.e. **24**

$$\Rightarrow (? - 2) \div 0.4 = 165 \div 3$$

$$\Rightarrow (? - 2) \div 0.4 = 55$$

$$\Rightarrow (? - 2) = 55 \times 0.4$$

$$\Rightarrow ? = 22 + 2$$

$$\Rightarrow ? = 24$$

Q:3 The correct answer is **option 4** i.e. **5**

$$\Rightarrow [9/4 + 4] \times 8 = ? \times 10$$

$$\Rightarrow 25/4 \times 8 = ? \times 10$$

$$\Rightarrow ? = 50/10$$

$$\Rightarrow ? = 5$$

Q:4 The correct answer is **option 5** i.e. **60**

$$\Rightarrow 22.5 \div 2.5 \times 8 - 12 = ?$$

$$\Rightarrow 9 \times 8 - 12 = ?$$

$$\Rightarrow ? = 72 - 12$$

$$\Rightarrow ? = 60$$

Q:5 The correct answer is **option 2** i.e. **25**

$$\Rightarrow 24 \times ? = 20 \times 5 \times 6$$

$$\Rightarrow 24 \times ? = 600$$

$$\Rightarrow ? = 25$$

Q:6 The correct answer is **Option 1** i.e. **5**.

$$14 \times 627 \div \sqrt{1089} = (?)^3 + 141$$

Using the BODMAS rule:

$$\Rightarrow 14 \times 627 \div 33 = (?)^3 + 141$$

$$\Rightarrow 14 \times 19 = (?)^3 + 141$$

$$\Rightarrow 266 = (?)^3 + 141$$

$$\Rightarrow 125 = (?)^3$$

$$\Rightarrow ? = 5$$

Q:7 The correct answer is **Option 1** i.e. **48**.

$$27 - [16^2 - (273 + 281) \div 2] = ?$$

Using the BODMAS rule:

$$\Rightarrow 27 - [256 - 554/2] = ?$$

$$\Rightarrow 27 - 256 + 277 = ?$$

$$\Rightarrow ? = 48$$

Q:8 The correct answer is **Option 2** i.e. **7.2**.

$$2.25\% \text{ of } (80\% \text{ of } 800) - 1.5\% \text{ of } (60\% \text{ of } 800) = ?$$

Using the BODMAS rule:

$$\Rightarrow ? = 2.25\% \text{ of } \{(80/100) \times 800\} - 1.5\% \text{ of } \{(60/100) \times 800\}$$

$$\Rightarrow ? = 2.25\% \text{ of } 640 - 1.5\% \text{ of } 480$$

$$\Rightarrow ? = (2.25/100) \times 640 - (1.5/100) \times 480$$

$$\Rightarrow ? = 14.4 - 7.2$$

$$\Rightarrow ? = 7.2$$

Q:9 The correct answer is **Option 4** i.e. **33.74**.

$$4.5 + 23.50 + 14.58 - 17.68 \times 0.5 = ?$$

$$\Rightarrow 4.5 + 23.50 + 14.58 - 8.84 = ?$$

$$\Rightarrow 42.58 - 8.84 = ?$$

$$\Rightarrow ? = 33.74$$

Q:10 The correct answer is **Option 1** i.e. **3³**.

$$\{(7.29 \times 2.7) \div 1000\} \times 10^3 = (?)^3 \times 10^{-3}$$

$$\Rightarrow (?)^3 \times 10^{-6} = \{(19.683) \div 1000\}$$

$$\Rightarrow (?)^3 \times 10^{-6} = 19683 \times 10^{-6}$$

$$\Rightarrow (?)^3 = 19683$$

$$\Rightarrow (?)^3 = (27)^3$$

On comparing both sides

$$\Rightarrow ? = 27$$

$$\Rightarrow ? = 3^3$$