3.17-2 Missing Number (Balance the Equation): Practice Set 2: 10-minute Pack

GL ASSESSMENT GL VR type 17 · about 10 minutes

Total Marks

Name: _____ Date: ____ / ____ / _____

Each question shows a number sentence with a value missing, marked [ ]. Calculate the value of each side of the equation separately, then work out the number that must go in the gap so that both sides balance (are equal). If a side contains brackets or a power, apply the correct order of operations: brackets first, then powers, then multiplication and division, then addition and subtraction. Choose the option, A) to E), that correctly completes the equation. Exactly one option makes both sides equal.

Worked example. 12 - 4 = 5 + [ ] **Answer: 3.** Evaluate the left-hand side first: 12 - 4 = 8. The right-hand side must also equal 8, so 5 + [ ] = 8, which means [ ] = 8 - 5 = 3.

1 4 + 9 = 7 + [ ]

- ☐ A) 7
- ☐ B) 5
- ☐ C) 6
- ☐ D) 16
- ☐ E) 20

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2 7 x 8 = 4 x [ ]

- ☐ A) 224
- ☐ B) 8
- ☐ C) 15
- ☐ D) 14
- ☐ E) 7

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3 60 - 24 = 6 x [ ]

- ☐ A) 10
- ☐ B) 30
- ☐ C) 5
- ☐ D) 7
- ☐ E) 6

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4 (3 + 4) x 5 = [ ] x 7

- [ ] A) 245
- [ ] B) 5
- [ ] C) 1
- [ ] D) 6
- [ ] E) 7

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5 72 / 8 = [ ] + 3

- [ ] A) 6
- [ ] B) 7
- [ ] C) 5
- [ ] D) 12
- [ ] E) 27

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6 5 x 4 + 8 = [ ] x 4

- [ ] A) 8
- [ ] B) 5
- [ ] C) 7
- [ ] D) 112
- [ ] E) 14

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7 (15 + 5) / 5 = [ ] - 2

- [ ] A) 18
- [ ] B) 5
- [ ] C) 2
- [ ] D) 6
- [ ] E) 22

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8 7 x 5 - 15 = [ ] x 5

- [ ] A) 100
- [ ] B) 10
- [ ] C) 7
- [ ] D) 5
- [ ] E) 4

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9 (6 + 4) x (8 - 3) = [ ] x 10

- [ ] A) 10
- [ ] B) 500
- [ ] C) 40
- [ ] D) 5
- [ ] E) 6

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10 8^2 - 19 = [ ] x 5

- [ ] A) 9
- [ ] B) 225
- [ ] C) 10
- [ ] D) 40
- [ ] E) 5

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11 (14 - 6) x (2 + 4) = 4 x [ ]

- [ ] A) 8
- [ ] B) 12
- [ ] C) 44
- [ ] D) 13
- [ ] E) 192

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12 11 - 4 = 3 + [ ]

- [ ] A) 5
- [ ] B) 10
- [ ] C) 14
- [ ] D) 3
- [ ] E) 4

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13 8 x 6 - 3 x 4 = [ ] x 6

- [ ] A) 30
- [ ] B) 216
- [ ] C) 6
- [ ] D) 12
- [ ] E) 7

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Mark scheme · 3.17-2 Missing Number (Balance the Equation): Practice Set 2: 10-minute Pack

Question 1

C) 6 - 4 + 9 = 13, so 13 - 7 = 6 **B1**

Answer: 6

Question 2

D) 14 - 7 x 8 = 56, so 56 / 4 = 14 **B1**

Answer: 14

Question 3

E) 6 - 60 - 24 = 36, so 36 / 6 = 6 **B1**

Answer: 6

Question 4

B) 5 - (3 + 4) x 5 = 35, so 35 / 7 = 5 **B1**

Answer: 5

Question 5

A) 6 - 72 / 8 = 9, so 9 - 3 = 6 **B1**

Answer: 6

Question 6

C) 7 - 5 x 4 + 8 = 28, so 28 / 4 = 7 **B1**

Answer: 7

Question 7

D) 6 - (15 + 5) / 5 = 4, so 4 + 2 = 6 **B1**

Answer: 6

Question 8

E) 4 - 7 x 5 - 15 = 20, so 20 / 5 = 4 **B1**

Answer: 4

Question 9

D) 5 - (6 + 4) x (8 - 3) = 50, so 50 / 10 = 5 **B1**

Answer: 5

Question 10

A) 9 - 8^2 = 64, 64 - 19 = 45, so 45 / 5 = 9 **B1**

Answer: 9

Question 11

B) 12 - (14 - 6) x (2 + 4) = 48, so 48 / 4 = 12 **B1**

Answer: 12

Question 12

E) 4 - 11 - 4 = 7, so 7 - 3 = 4 **B1**

Answer: 4

Question 13

C) 6 - 8 x 6 = 48, 3 x 4 = 12, 48 - 12 = 36, so 36 / 6 = 6 **B1**

Answer: 6

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