Worksheet 11

Year 3 Mathematics — Australian Curriculum v9.0

Subtopic: Unknown Values in Addition and Subtraction
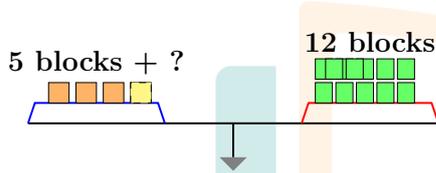
Name: _____   **Date:** _____

Score: _____ / 30

Section 1: Fluency — Visual Balance Scales (Questions 1–10)

Instructions: Find the missing number to balance the scale.

Question 1: $5 + ? = 12$

5 blocks + ?   12 blocks

Answer: $? =$ _____

Question 2: $8 + ? = 15$

8 + ?   15

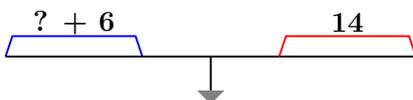**Answer:** $? =$ _____

Question 3: Find the missing number: $12 + ? = 20$

Answer: _____

Question 4: $? + 6 = 14$

? + 6   14

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Answer: $? =$ _____

Question 5: Balance the scale: $7 + ? = 18$

Answer: _____

Question 6: $15 + ? = 25$

Answer: _____

Question 7: $? + 9 = 22$

Answer: _____

Question 8: Find the unknown: $13 + ? = 30$

Answer: _____

Question 9: $? + 12 = 28$

Answer: _____

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Question 10: Balance: $18 + ? = 35$

Answer: _____

> **Good Job!**
> What did the zero say to the eight? Nice belt!

Section 2: Reasoning — Number Sentences (Questions 11–20)

Instructions: Find the missing number in each equation.

Question 11: $24 + \_\_\_ = 50$

Answer: _____

Question 12: $\_\_\_ + 15 = 30$

Answer: _____

Question 13: $32 + \_\_\_ = 60$

Answer: _____

Question 14: $\_\_\_ + 25 = 45$

3

Answer: _____

Question 15: $17 + \_\_\_ = 40$

Answer: _____

Question 16: $\_\_\_ + 19 = 50$

Answer: _____

Question 17: $28 + \_\_\_ = 55$

Answer: _____

Question 18: $\_\_\_ + 34 = 70$

Answer: _____

Question 19: $45 + \_\_\_ = 80$

Answer: _____

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Question 20: $\_\_\_ + 27 = 65$

Answer: _____

Good Job!

Why was the math book sad? It had too many problems!

Section 3: Challenge — Word Problems (Questions 21–30)

Instructions: Read carefully and find the unknown value.

Question 21: I have some stickers. I buy 15 more. Now I have 45. How many did I start with?

Answer: _____

Question 22: Emma scored some points. Then she scored 12 more points. Her total is now 38 points. How many points did she start with?

Answer: _____

Question 23: A library had some books. They bought 25 new books. Now they have 80 books. How many books did they start with?

Answer: _____

Question 24: Josh has some marbles. His friend gives him 18 more. Now he has 50 marbles. How many did Josh have at first?

Answer: _____

Question 25: A farmer planted some trees. She planted 14 more trees the next week. Now she has 45 trees. How many trees did she plant at first?

Answer: _____

Question 26: Tom collected some shells. He found 22 more at the beach. Now he has 60 shells. How many shells did Tom have before?

Answer: _____

Question 27: Sarah saved some money. Her dad gave her \$16. Now she has \$48. How much money did Sarah have at the start?

Answer: _____

Question 28: A shop had some toys. They received a delivery of 35 more toys. Now they have 90 toys. How many toys did they have before the delivery?

Answer: _____

Question 29: Lisa read some pages of her book. She read 28 more pages today. She has now read 75 pages. How many pages had she read before today?

Answer: _____

Question 30: A zoo had some animals. They got 19 new animals. Now they have 65 animals. How many animals did the zoo have at first?

Answer: _____

Good Job!

What's a detective's favourite subject? Mystery-matics!

Excellent Work! You've completed Worksheet 11!

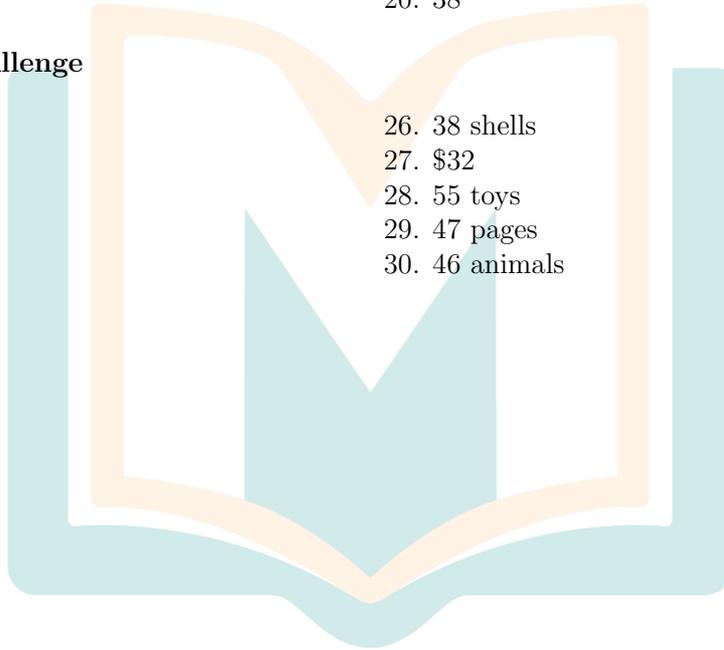# Answer Key — Worksheet 11

Year 3 Mathematics

Section 1: Fluency
1. 7
2. 7
3. 8
4. 8
5. 11
6. 10
7. 13
8. 17
9. 16
10. 17

Section 2: Reasoning
11. 26
12. 15
13. 28
14. 20
15. 23
16. 31
17. 27
18. 36
19. 35
20. 38

Section 3: Challenge

21. 30 stickers
22. 26 points
23. 55 books
24. 32 marbles
25. 31 trees

26. 38 shells
27. $32
28. 55 toys
29. 47 pages
30. 46 animals

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Worksheet 12

Year 3 Mathematics — Australian Curriculum v9.0
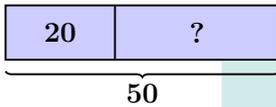
Subtopic: Unknown Values in Addition and Subtraction

Name: _____   **Date:** _____

Score: _____ / 30

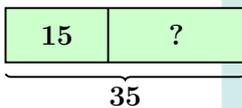## Section 1: Fluency — Part-Part-Whole Models (Questions 1–10)

Instructions: Use the bar model to find the missing part.

Question 1: The total is 50. One part is 20. What is the missing part?

20	?

50

Answer: 50 - 20 = _____

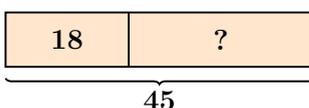**Question 2:** Total is 35. One part is 15. Find the missing part.

15	?

35

Answer: ? = _____

Question 3: Total: 60. Known part: 25. Unknown part: ?

Answer: 60 - 25 = _____

Question 4: Complete: 45 - 18 = ?

18	?

45

9

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Answer: ? = _____

Question 5: Find the missing part: Total = 80, One part = 35

Answer: _____

Question 6: 70 - 28 = ?

Answer: _____

Question 7: Total is 55. One part is 22. Find the other part.

Answer: _____

Question 8: 90 - 37 = ?

Answer: _____

Question 9: The whole is 65. One part is 29. What is the missing part?

Answer: _____

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Question 10: $100 - 43 = ?$

Answer: _____

> **Good Job!**
>
> Why did seven eat nine? Because you're supposed to eat three squared meals a day!

Section 2: Reasoning — Missing Minuends and Subtrahends (Questions 11–20)

Instructions: Find the missing number in each subtraction equation.

Question 11: ___ - 10 = 50

Answer: _____

Question 12: 35 - ___ = 20

Answer: _____

Question 13: ___ - 15 = 40

Answer: _____

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Question 14: $60 - \_\_\_ = 28$

Answer: _____

Question 15: $\_\_\_ - 24 = 36$

Answer: _____

Question 16: $75 - \_\_\_ = 43$

Answer: _____

Question 17: $\_\_\_ - 18 = 52$

Answer: _____

Question 18: $90 - \_\_\_ = 55$

Answer: _____

Question 19: $\_\_\_ - 27 = 48$

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Answer: _____

Question 20: 85 - ___ = 39

Answer: _____

☺ **Good Job!**
What do you call a missing number? Non-existent!

Section 3: Challenge — Two-Step Unknowns (Questions 21–30)

Instructions: Work backwards to find the mystery number.

Question 21: I think of a number. I subtract 5, then I add 10. The answer is 25. What is my number?

Answer: _____

Question 22: I start with a number. I subtract 12. The result is 30. What number did I start with?

Answer: _____

Question 23: A mystery number minus 8 equals 42. What is the mystery number?

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Answer: _____

Question 24: When I subtract 15 from a number, I get 35. What is the number?

Answer: _____

Question 25: I think of a number. I subtract 20, then add 5. The answer is 30. What was my starting number?

Answer: _____

Question 26: A number minus 18 gives 47. Find the number.

Answer: _____

Question 27: I start with a number, subtract 25, and get 55. What was my original number?

Answer: _____

Question 28: When 14 is subtracted from a mystery number, the result is 56. Find the mystery number.

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Answer: _____

Question 29: I think of a number. I subtract 30. The answer is 45. What number did I think of?

Answer: _____

Question 30: A number minus 22 equals 68. What is the number?

Answer: _____

> **Good Job!**
>
> Why did the student bring a ladder to math class? To solve high-level problems!

Fantastic! You've completed Worksheet 12!

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Answer Key — Worksheet 12

Year 3 Mathematics

Section 1: Fluency
1. 30
2. 20
3. 35
4. 27
5. 45
6. 42
7. 33
8. 53
9. 36
10. 57

Section 2: Reasoning
11. 60
12. 15
13. 55
14. 32
15. 60
16. 32
17. 70
18. 35
19. 75
20. 46

Section 3: Challenge

21. 20 (20-5=15, 15+10=25)
22. 42
23. 50
24. 50
25. 45 (45-20=25, 25+5=30)

26. 65
27. 80
28. 70
29. 75
30. 90

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