

# ADDING AND SUBTRACTING INTEGERS

Answer all of these questions. Remember to show your working out in all questions.

## MAIN QUESTIONS

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|-----|-------------------------|--|-------|-----|-------------------------|--|-------|
| 1.  | $45 - 73$               |  | -28   | 2.  | $-120 + 85$             |  | -35   |
| 3.  | $500 - (-300)$          |  | 800   | 4.  | $-2500 + 4000$          |  | 1500  |
| 5.  | $18 - 42 + 15$          |  | -9    | 6.  | $-75 + 130 - 25$        |  | 30    |
| 7.  | $8000 - 12000 + 5000$   |  | 1000  | 8.  | $-600 + (-450) - 300$   |  | -1350 |
| 9.  | $9200 - 15000 + 8000$   |  | 2200  | 10. | $-4800 + 3600 - 200$    |  | -1400 |
| 11. | $125 - 340 + 215$       |  | 0     | 12. | $-999 + 1000 - 50$      |  | -49   |
| 13. | $7200 - (-2800) + 1000$ |  | 11000 | 14. | $-15000 + 12300 - 800$  |  | -3500 |
| 15. | $560 - 890 + 450$       |  | 120   | 16. | $-7500 + 6000 - 2500$   |  | -4000 |
| 17. | $4250 - 3800 + 1750$    |  | 2200  | 18. | $-6200 - (-4800) + 700$ |  | -700  |
| 19. | $9900 - 7500 + 3600$    |  | 6000  | 20. | $-8430 + 9210 - 1000$   |  | -220  |
| 21. | $276 - 498 + 324$       |  | 102   | 22. | $-13000 + 11400 - 500$  |  | -2100 |
| 23. | $6500 - 8900 + 4300$    |  | 1900  | 24. | $-2470 - 1530 + 2000$   |  | -2000 |
| 25. | $8100 - (-1900) - 3000$ |  | 7000  | 26. | $-5760 + 4820 - 1100$   |  | -2040 |
| 27. | $1234 - 5678 + 4444$    |  | 0     | 28. | $-8999 + 10000 - 2001$  |  | -1000 |

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|-----|------------------------|--|-------|-----|-----------------------|--|-------|
| 29. | $7520 - 8430 + 2910$   |  | 2000  | 30. | $-6150 - 2850 + 9000$ |  | 0     |
| 31. | $3400 - (-6600) + 100$ |  | 10100 | 32. | $-9280 + 7360 - 1240$ |  | -3160 |
| 33. | $580 - 1290 + 710$     |  | 0     | 34. | $-4700 + 8300 - 4600$ |  | -1000 |
| 35. | $9999 - 10000 + 5001$  |  | 5000  | 36. | $-1234 - 8766 + 9000$ |  | -1000 |
| 37. | $2700 - 4800 + 3100$   |  | 1000  | 38. | $-3500 + 6200 - 4700$ |  | -2000 |
| 39. | $8640 - 5720 + 2080$   |  | 5000  | 40. | $-1930 - 4070 + 7000$ |  | 1000  |

## MASTER QUESTIONS



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- M1. A submarine at -250 metres ascends 180 metres then descends 70 metres. What is its final depth? | -140 metres
- M2. Emma has £3500 in her bank account. She pays a cheque for £4200 and then deposits £900. What is her new balance? | £200
- M3. The temperature in Leeds is  $-8^{\circ}\text{C}$ . It rises by  $12^{\circ}\text{C}$  during the day then falls by  $5^{\circ}\text{C}$  overnight. What is the final temperature? |  $-1^{\circ}\text{C}$
- M4. A mountain climber starts at 2400 metres above sea level. She descends 800 metres, ascends 350 metres, then descends another 450 metres. What is her elevation? | 1500 metres
- M5. A company's profit was £-7500 in Q1. In Q2 it made £12000 profit, but lost £9500 in Q3. What is the overall profit? | £-5000
- M6. In a game, James scored 250 points, lost 400 points for a penalty, then gained 300 points. What is his total score? | 150 points
- M7. A plane flying at 8500 metres descends 2300 metres for landing, aborts, and climbs 1500 metres. What is its altitude? | 7700 metres

- M8.** The Dead Sea shore is at -430 metres. A geologist walks up 125 metres then down 80 metres. What is her position? | -385 metres
- M9.** A glacier retreated 15 metres in 2020, advanced 8 metres in 2021, then retreated 12 metres in 2022. What was its net change? | 19 metres retreat
- M10.** A scuba diver at -30 metres dives to a shipwreck at -65 metres, then ascends 25 metres to photograph coral. What is her depth? | -40 metres