

Addition and Subtraction of Integers

Unit: Integers - Student Practice Worksheet

Overview: The temperature was -3°C . It rose by 8 degrees. Kabir added: $-3 + 8$, and hesitated — negative numbers still felt like a trick. Anaya pulled out a number line and just walked the steps — no trick needed at all.

Practice Questions (30 Total)

Section A - Easy

Q1. The walk starts at maroon -3 and ends at teal 5 after 8 steps right. What is $-3 + 8$?



- ☐ A. 5
- ☐ B. -11
- ☐ C. 11
- ☐ D. -5

Q2. Adding a positive number on a number line means moving:

- ☐ A. Left
- ☐ B. Up
- ☐ C. Right
- ☐ D. Down

Q3. Find: $5 - 9$.

- ☐ A. 4
- ☐ B. -4
- ☐ C. 14
- ☐ D. -14

Q4. The card rewrites $-2 - (-6)$ as $-2 + 6$. What is the result?

$$-2 - (-6)$$

$$= -2 + 6$$

- ☐ A. 4
- ☐ B. -8
- ☐ C. 8
- ☐ D. -4

Q5. Adding a negative number on a number line means moving:

- ☐ A. Right
- ☐ B. Up
- ☐ C. Down
- ☐ D. Left

Q6. Find: $-5 + (-3)$.

- ☐ A. 2
- ☐ B. -2
- ☐ C. -8
- ☐ D. 8

Q7. The line starts at 6 and ends at 10 after subtracting a negative. What is $6 - (-4)$?



- ☐ A. 2
- ☐ B. -10
- ☐ C. -2
- ☐ D. 10

Q8. The opposite of -7 is:

- ☐ A. -7
- ☐ B. 7
- ☐ C. 0
- ☐ D. 17

Q9. A temperature of 2°C drops by 5 degrees. What is the new temperature?

- ☐ A. -3°C
- ☐ B. 7°C
- ☐ C. 3°C
- ☐ D. -7°C

Q10. Two minus signs together become what, and how does that match $a - (-b) = a + b$?

- ☐ A. Another minus
- ☐ B. A plus
- ☐ C. Zero
- ☐ D. A multiplication

Section B - Medium

Q11. The card shows $-4 - (-6)$ rewritten as $-4 + 6$. What is the result?

$$-4 - (-6) = -4 + 6$$

- ☐ A. 2
- ☐ B. -10
- ☐ C. 10
- ☐ D. -2

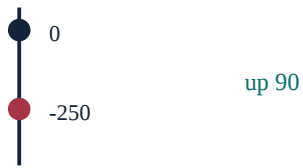
Q12. Why does Ms. Rao say 'the number line never lies'?

- ☐ A. Because number lines are only for positive numbers
- ☐ B. Because physically counting steps always gives a checkable, reliable answer
- ☐ C. Because it is impossible to make a mistake counting
- ☐ D. Because number lines replace the need for any rules

Q13. Find: $-12 + 20$.

- ☐ A. -8
- ☐ B. 8
- ☐ C. 32
- ☐ D. -32

Q14. Start at -250 m and go up 90. Where does the arrow land?



- ☐ A. -160 m
- ☐ B. -340 m
- ☐ C. 160 m
- ☐ D. 340 m

Q15. Find: $-7 - 7$.

- ☐ A. -14
- ☐ B. 0
- ☐ C. 14
- ☐ D. -0

Q16. Find: $15 - 22$.

- ☐ A. 7
- ☐ B. 37
- ☐ C. -7
- ☐ D. -37

Q17. The maroon -500 and teal +500 cancel. What is the balance?



- ☐ A. -Rs. 1000
- ☐ B. Rs. 500
- ☐ C. -Rs. 500
- ☐ D. Rs. 0

Q18. Find: $8 - (-8)$.

- ☐ A. 0
- ☐ B. -16

☐ C. 16

☐ D. 8

Q19. Find: $-18 - (-25)$.

☐ A. -43

☐ B. 43

☐ C. -7

☐ D. 7

Q20. Add -20 and -25 using the 'same-sign' rule, then check on a number line. What total?

☐ A. 15

☐ B. -45

☐ C. -15

☐ D. 45

Section C - Challenge

Q21. The chain is -15, then +22, then -8. What is the final reading?

$$-15 \rightarrow +22 \rightarrow -8$$

☐ A. -1

☐ B. 1

☐ C. 29

☐ D. -29

Q22. Kabir claims: 'Subtracting a bigger positive number from a smaller positive number always gives a negative result.' Is this true?

☐ A. No, it always stays positive

☐ B. Only true for even numbers

☐ C. Only true if both numbers are equal

☐ D. Yes — the difference must go below zero

Q23. Find: $-20 - (-15) + (-9)$.

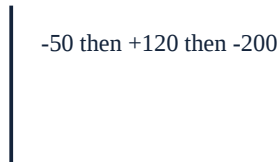
☐ A. 14

☐ B. -14

☐ C. -44

☐ D. 44

Q24. The depth story is -50, then +120, then -200. Where do you finish?



☐ A. 130 m

☐ B. 270 m

☐ C. -130 m

☐ D. -270 m

Q25. Anaya says: 'Adding two negative numbers always gives a result further from zero than either one alone.' Is this true?

☐ A. No, the result is always closer to zero

☐ B. Only true if both numbers are equal

☐ C. Only true for whole numbers greater than 10

☐ D. Yes — combining two negatives makes the total more negative

Q26. Find the missing number: $-6 + \underline{\quad} = 4$.

☐ A. 10

☐ B. -10

☐ C. 2

☐ D. -2

Q27. The money strip is $150 - 80 + 35 - 20$. What remains?

$$150 - 80 + 35 - 20$$

☐ A. Rs. 105

☐ B. Rs. 65

☐ C. Rs. 85

☐ D. Rs. 285

Q28. Why is 'subtraction is adding the opposite' considered the deeper unifying rule behind all integer addition and subtraction?

- ☐ A. Because subtraction and addition are actually unrelated operations
- ☐ B. Because it turns every subtraction problem into an addition problem, so only ONE set of rules (for addition) is ever needed
- ☐ C. Because it only works for positive numbers
- ☐ D. Because it eliminates the need for a number line entirely

Q29. Find the missing number: $___ - (-9) = 3$.

- ☐ A. 6
- ☐ B. -6
- ☐ C. 12
- ☐ D. -12

Q30. 8000 m down 3500 then down 2200. Compute it, and say which way each move goes on a vertical number line.

- ☐ A. 2300 m
- ☐ B. -2200 m
- ☐ C. 4500 m
- ☐ D. 1800 m

Answer Key

Q1: (A) (a) 5. Start at -3 , move right 8.

Q2: (C) (c) Right.

Q3: (B) (b) -4 . Start at 5, move left 9.

Q4: (A) (a) 4. $-2 - (-6) = -2 + 6 = 4$.

Q5: (D) (d) Left.

Q6: (C) (c) -8 . Both negative, add and keep the negative sign.

Q7: (D) (d) 10. $6 - (-4) = 6 + 4 = 10$.

Q8: (B) (b) 7. Same value, flipped sign.

Q9: (A) (a) -3°C . $2 - 5 = -3$.

Q10: (B) (b) A plus — subtracting a negative is the same as adding.

Q11: (A) (a) 2. $-4 - (-6) = -4 + 6 = 2$.

Q12: (B) (b) Physically counting steps on a number line always gives a checkable, reliable result, unlike guessing a sign.

Q13: (B) (b) 8. Start at -12 , move right 20.

Q14: (A) (a) -160 m. $-250 + 90 = -160$.

Q15: (A) (a) -14 . $-7 - 7 = -7 + (-7) = -14$.

Q16: (C) (c) -7 . $15 - 22 = 15 + (-22) = -7$.

Q17: (D) (d) Rs. 0. $-500 + 500 = 0$.

Q18: (C) (c) 16. $8 - (-8) = 8 + 8 = 16$.

Q19: (D) (d) 7. $-18 - (-25) = -18 + 25 = 7$.

Q20: (B) (b) -45 . Both negative: add and keep the negative sign.

Q21: (A) (a) -1 . $-15+22=7$; $7-8=-1$.

Q22: (D) (d) Yes — if you subtract a larger amount than you started with, the result must go below zero, making it negative.

Q23: (B) (b) -14 . $-20+15=-5$; $-5+(-9)=-14$.

Q24: (C) (c) -130 m. $-50+120=70$; $70-200=-130$.

Q25: (D) (d) Yes — combining two negative numbers always moves further left (more negative), away from zero.

Q26: (A) (a) 10. $-6+10=4$.

Q27: (C) (c) Rs. 85. $150-80=70$; $70+35=105$; $105-20=85$.

Q28: (B) (b) It turns every subtraction into an equivalent addition, meaning a single consistent rule set (for addition) handles both operations.

Q29: (B) (b) -6 . $-6 + 9 = 3$.

Q30: (A) (a) 2300 m. $8000 - 3500 = 4500$; $4500 - 2200 = 2300$ m.

You've got this! Keep learning and shining! - Ruchi Math Coaching