

Adding Integers with the Same Sign

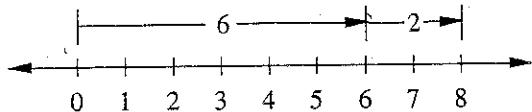
Objective: To add integers with the same sign.

Terms to Know

Adding Integers with the Same Sign Adding two positive integers or two negative integers. The sum has the same sign as the integers.

Example 1 Find the sum $6 + 2$.

Solution



Start at 0.

Slide 6 units right.

Slide 2 more units right.

Stop at 8.

So $6 + 2 = 8$.

Find each sum.

1. $3 + 17$

4. $33 + 46$

7. $38 + 3$

10. $4 + 19$

13. $2 + 10$

2. $61 + 24$

5. $22 + 1$

8. $8 + 21$

11. $73 + 11$

14. $28 + 62$

3. $27 + 7$

6. $5 + 31$

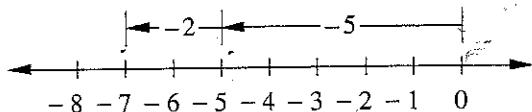
9. $47 + 9$

12. $6 + 42$

15. $16 + 4$

Example 2 Find the sum $-5 + (-2)$.

Solution



Start at 0.

Slide 5 units to the left.

Slide 2 more units left.

Stop at -7.

So $-5 + (-2) = -7$.

Adding Integers with the Same Sign (continued)

Find each sum.

16. $-6 + (-18)$

17. $-23 + (-71)$

18. $-3 + (-27)$

19. $-27 + (-10)$

20. $-8 + (-34)$

21. $-12 + (-4)$

22. $-24 + (-68)$

23. $-11 + (-11)$

24. $-11 + (-46)$

25. $-2 + (-21)$

26. $-37 + (-9)$

27. $-7 + (-16)$

28. $-16 + (-18)$

29. $-5 + (-42)$

30. $-40 + (-8)$

Rule for adding integers with the same sign To add two integers that have the *same sign*, add their absolute values. Then give the sum the sign of the integers.

Example 3 Find each sum.

a. $-7 + (-9)$

b. $16 + 11$

Solution

a. $|-7| = 7$ and $|-9| = 9$

$7 + 9 = 16$, so

$-7 + (-9) = -16$

b. $|16| = 16$ and $|11| = 11$, so

$16 + 11 = 27$

Find each sum.

31. $-6 + (-9)$

32. $-12 + (-19)$

33. $22 + 17$

34. $11 + 13$

35. $-8 + (-2)$

36. $14 + 5$

Spiral Review37. Estimate the quotient: $4526 \div 89$ (*Toolbox Skill 3*)38. Find the sum: $-8 + (-3)$ (*Lesson 3-2*)39. Simplify: $6(8m + 3)$ (*Lesson 2-2*)40. Find the difference: $\frac{11}{12} - \frac{13}{18}$ (*Toolbox Skill 17*)