

LESSON

1-5**Practice B*****Subtracting Integers*****Subtract.**

1. $8 - 2$

2. $10 - 5$

3. $7 - 12$

4. $16 - 10$

5. $3 - 10$

6. $16 - 9$

7. $-4 - 9$

8. $-8 - 10$

9. $33 - 57$

10. $16 - 49$

11. $-114 - 19$

12. $-88 - (-10)$

Evaluate each expression for the given value of the variable.

13. $x - 8$ for $x = 10$

14. $w - 10$ for $w = 15$

15. $12 - t$ for $t = -8$

16. $15 - x$ for $x = -12$

17. $w - 20$ for $w = -15$

18. $-15 - x$ for $x = -10$

19. $-9 - x$ for $x = -20$

20. $y - (-10)$ for $y = -10$

21. $x - (-15)$ for $x = -5$

22. $|w - 8| + 6$ for $w = 9$

23. $16 - |t + 8|$ for $t = 10$

24. $|14 - x| - 9$ for $x = 8$

25. The altitude of Mt. Blackburn in Alaska is 16,390 feet. The altitude of Mt. Elbert in Colorado is 14,433 feet. What is the difference in the altitudes of the two mountains?

26. In January, Jesse weighed 230 pounds. By November, he weighed 185 pounds. How much did Jesse's weight change?

LESSON Practice A
1-5 Subtracting Integers

Subtract.

1. $4 - 1$ <u>3</u>	2. $1 - 2$ <u>-1</u>	3. $-2 - 2$ <u>-4</u>	4. $-2 - 1$ <u>-3</u>
5. $5 - 4$ <u>1</u>	6. $7 - 10$ <u>-3</u>	7. $6 - 1$ <u>5</u>	8. $2 - 9$ <u>-7</u>
9. $15 - 8$ <u>7</u>	10. $7 - 21$ <u>-14</u>	11. $-6 - 10$ <u>-16</u>	12. $22 - 8$ <u>14</u>
13. $13 - 5$ <u>8</u>	14. $72 - 11$ <u>61</u>	15. $-46 - 90$ <u>-136</u>	16. $2 - 11$ <u>-9</u>

Evaluate each expression for the given value of the variable.

17. $x - 3$ for $x = 4$ <u>1</u>	18. $a - 2$ for $a = 5$ <u>3</u>	19. $t - 1$ for $t = 3$ <u>2</u>
20. $6 - y$ for $y = 2$ <u>4</u>	21. $5 - w$ for $w = 1$ <u>4</u>	22. $-2 - d$ for $d = -5$ <u>3</u>
23. $-3 - x$ for $x = -6$ <u>3</u>	24. $ t - 6 + 2$ for $t = 8$ <u>4</u>	25. $ 2 + y + 2$ for $y = 1$ <u>5</u>

26. The temperature in Vancouver, Washington, is 23°F . The temperature in Nome, Alaska, is -2°F . What is the difference in the two temperatures?
 25°F

27. Kosey has \$630 in his checking account. He writes a check for \$160. What is his new balance in the account?
\$470

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LESSON Practice B
1-5 Subtracting Integers

Subtract.

1. $8 - 2$ <u>6</u>	2. $10 - 5$ <u>5</u>	3. $7 - 12$ <u>-5</u>	4. $16 - 10$ <u>6</u>
5. $3 - 10$ <u>-7</u>	6. $16 - 9$ <u>7</u>	7. $-4 - 9$ <u>-13</u>	8. $-8 - 10$ <u>-18</u>
9. $33 - 57$ <u>-24</u>	10. $16 - 49$ <u>-33</u>	11. $-114 - 19$ <u>-133</u>	12. $-88 - (-10)$ <u>-78</u>

Evaluate each expression for the given value of the variable.

13. $x - 8$ for $x = 10$ <u>2</u>	14. $w - 10$ for $w = 15$ <u>5</u>	15. $12 - t$ for $t = -8$ <u>20</u>
16. $15 - x$ for $x = -12$ <u>27</u>	17. $w - 20$ for $w = -15$ <u>-35</u>	18. $-15 - x$ for $x = -10$ <u>-5</u>
19. $-9 - x$ for $x = -20$ <u>-5</u>	20. $y - (-10)$ for $y = -10$ <u>4</u>	21. $x - (-15)$ for $x = -5$ <u>10</u>
22. $ w - 8 + 6$ for $w = 9$ <u>7</u>	23. $16 - t + 8 $ for $t = 10$ <u>-2</u>	24. $ 14 - x - 9$ for $x = 8$ <u>-3</u>

25. The altitude of Mt. Blackburn in Alaska is 16,390 feet. The altitude of Mt. Elbert in Colorado is 14,433 feet. What is the difference in the altitudes of the two mountains?
1957 feet

26. In January, Jesse weighed 230 pounds. By November, he weighed 185 pounds. How much did Jesse's weight change?
-45 pounds

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LESSON Practice C
1-5 Subtracting Integers

Subtract.

1. $-15 - 22$ <u>-37</u>	2. $-18 - (-25)$ <u>7</u>	3. $27 - (-30)$ <u>57</u>	4. $35 - 50$ <u>-15</u>
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Evaluate each expression for the given value of the variable.

5. $x - 25$ for $x = 35$ <u>10</u>	6. $a - 27$ for $a = 18$ <u>-9</u>	7. $27 - x$ for $x = -17$ <u>44</u>
8. $35 - a$ for $a = -50$ <u>85</u>	9. $-29 - y$ for $y = 32$ <u>-61</u>	10. $-28 - x$ for $x = -15$ <u>-13</u>
11. $ 19 - x - -15 $ for $x = 24$ <u>-10</u>	12. $ y + 8 + 16 $ for $y = -13$ <u>21</u>	
13. $ 25 - t - 4 - 9 $ for $t = 15$ <u>5</u>	14. $x - y$ for $x = -10$ and $y = -5$ <u>-5</u>	
15. $-m - n$ for $m = -9$ and $n = -11$ <u>20</u>	16. $r - (-s)$ for $r = -16$ and $s = -14$ <u>-30</u>	

17. Confucius, a Chinese philosopher, lived from 551 B.C. to 479 B.C. How many years did Confucius live?
72 years

18. Write a subtraction expression for three hundred forty-nine from two hundred twenty-six.
 $226 - 349$

19. Simplify the answer in Exercise 18.
-123

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LESSON Review for Mastery
1-5 Subtracting Integers

To subtract one integer from another, rewrite the subtraction as the addition of an opposite. Then use the rules for adding integers.

4 - (-5) Change subtraction to addition of a positive. $4 + (+5)$	Subtracting a Negative	4 - 5 Change subtraction to addition of a negative. $4 + (-5)$	Subtracting a Positive
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$\begin{matrix} \text{V} & \text{V} & \text{V} & \text{V} \\ \text{V} & \text{V} & \text{V} & \text{V} & \text{V} & \text{V} \end{matrix}$ $\begin{matrix} \text{V} & \text{V} & \text{V} & \text{V} \\ \text{R} & \text{R} & \text{R} & \text{R} & \text{R} \end{matrix}$

$4 - (-5) = 4 + 5 = 9$ $4 - 5 = 4 + (-5) = -1$

On a calculator, $\boxed{-}$ means subtract and $\boxed{+/-}$ will enter a negative number.

To do $4 - (-5)$ on a calculator: To do $4 - 5$ on a calculator:

Input: 4 $\boxed{-}$ 5 $\boxed{+/-}$ $\boxed{=}$ Input: 4 $\boxed{-}$ 5 $\boxed{=}$

Display: 9 Display: -1

Complete to find the difference. Remember to change two signs.

1. $7 - (-6)$ is the same as $7 \underline{+} \underline{+} 6 = \underline{13}$
2. $-4 - 3$ is the same as $-4 \underline{+} \underline{-} 3 = \underline{-7}$
3. $-2 - (-9)$ is the same as $-2 \underline{+} \underline{+} 9 = \underline{7}$
4. $14 - 16$ is the same as $14 \underline{+} \underline{-} 16 = \underline{-2}$
5. $7 - (-10)$ is the same as $7 \underline{+} \underline{+} 10 = \underline{17}$
6. $-8 - (-19)$ is the same as $-8 \underline{+} \underline{+} 19 = \underline{11}$
7. $-5 - 12$ is the same as $-5 \underline{+} \underline{-} 12 = \underline{-17}$

Find each difference. Use a calculator to check.

8. $7 - 12 = \underline{-5}$	9. $-3 - 8 = \underline{-11}$	10. $17 - (-4) = \underline{21}$
11. $-14 - (-3) = \underline{-11}$	12. $5 - 8 = \underline{-3}$	13. $-6 - 4 = \underline{-10}$

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