

Name: Answer Key

Unit 1 Review

<p>1. The daily change in the stock market for the week was +4, -8, -2, +14, -13. What was the average change for the week?</p> $4 - 8 - 2 + 14 - 13 = 18 - 23 = -5$	<p>2. If it is -25F in Rantoul and it is 75F in Honolulu, what is the temperature difference between the two cities? (larger minus smaller)</p> $75 - (-25) = 75 + 25 = 100^{\circ}\text{F}$
<p>3. In order to encourage recycling, city of Taiyuan is offering 20 cents for every kilogram of newspapers collected, five cents per plastic bottle. Write an expression for the total amount earned from recycling. Write an expression that represents how much the city will earn.</p>	<p>4. Use the expression from question 3 to determine how much the city made if Chen brings in ten kilograms of newspapers, 32 plastic bottles, how much will he receive?</p>
<p>5. Simplify</p> $-16 + (-11) - 14 + (-3) =$ $-16 - 11 - 14 - 3 =$ -44	<p>6. Simplify</p> $5 - 15 + 6 + 18 = 29 - 15 = 14$
<p>7. Simplify</p> $-6(7k + 11) =$ $-42k - 66$	<p>8. $-(-2 - n) = 2 + n$</p>
<p>9. $-5(2k + 2) - 14k + (-32)$</p> $-10k - 10 - 14k - 32 =$ $-24k - 42$	<p>10. Write algebraically 7 less than fifteen times a number</p> $15n - 7$
<p>11. Simplify</p> $-8 + 8k + 14 - 19k =$ $-11k + 6$	<p>12. Write algebraically Four times the sum of a number and six</p> $4(n + 6)$
<p>13. Simplify</p> $-9(2x + 4) - 2(5x - 1)$ $-18x - 36 - 10x + 2 =$ $-28x - 34$	<p>14. Simplify</p> $3(4x - 5y) - (8x + 12y)$ $12x - 15y - 8x - 12y =$ $4x - 27y$

<p>30. Find the Absolute Value</p> $ -12 = 12$	<p>29. Solve</p> $ 8 - 16 = -8 = 8$
<p>28. Simplify</p> $-6p + 11$	<p>27. An elevator is on the twentieth floor. It goes down 11 floors, then up 5 floors, and then descends 9 floors. What floor is the elevator on now?</p> $20 - 10 = 10 \text{ (ground floor)}$ $10 - 11 + 5 - 9 = -5$
<p>26. $54 \div -6 + 2(3 - 8 \times 4) =$</p> $54 \div -6 + 2(-29) =$ $-9 + 2(-29) =$ $-9 - 58 = -67$	<p>25. $-42 - (-35) - 16 + 33 =$</p> $-42 + 35 - 16 + 33 =$ $-7 - 16 + 33 =$ $-19 + 33 = 14$
<p>24. Evaluate when $x = 7$ and $y = -4$</p> $2(x + y) - (6x - 5y) =$ $2(7 + (-4)) - (6(7) - 5(-4)) =$ $2(3) - (42 + 20) =$ $6 - 62 = -56$	<p>23. $-20 \div -2 =$</p> 10
<p>22. $-8 - (-19) =$</p> $-8 + 19 = 11$	<p>21. Evaluate the expression from question 20 for 11 months of service.</p> $40(11) + 35 =$ $440 + 35 = 475$
<p>20. A cell phone company charges \$40 per month plus a \$35 activation fee. Create an expression to represent the total cost.</p> $40x + 35$	<p>19. Evaluate when $x = -2$ and $y = 5$</p> $4x - (7 - x) - 6y =$ $4(-2) - (7 - (-2)) - 6(5) =$ $-8 - (7 + 2) - 30 =$ $-8 - 9 - 30 = -47$
<p>18. $8d - 10 + 4d + 2 =$</p> $12d - 8$	<p>17. $-6a - 8a + 4 + 2a - 1 =$</p> $-12a + 3$
<p>16. $9 + (-3)^3 + 40 \div (-3 - 7) =$</p> $9 + (-27) + 40 \div (-10) =$ $9 - 27 - 4 =$ $-18 - 4 = -22$	<p>15. $3 \times 4^2 \div 12 + (8 - 2(4 - 6)) =$</p> $3 \cdot 16 \div 12 + 12 =$ $48 \div 12 + 12 =$ $4 + 12 = 16$