## Mastery Test \#2 Review

Evaluate the expression.
$13(5+3)+9$

2 4[17-(6+3)]

Find the sum.
(3) $-2+(-12)$
(4) $8+(-19)$

Find the difference.
(5) $-22-(-7)$

Find the change in temperature.
(6) From $-13^{\circ} \mathrm{C}$ to $15^{\circ} \mathrm{C}$

Evaluate the expression when $x=-4, y=10$, and $z=-9$.
(7) $x-y-z$

Find the product.
$8-3(-92)$

9 -6(5)(-1)

Find the quotient.
$10-204 \div(-4)$

11 Use the formula $V=s^{3}$ to find the volume of the cube with side length $s$.


12 You are playing a board game. All even numbers are positive, and all odd numbers are negative. A positive number indicates forward movement, and a negative number indicates backward movement. During your last 5 turns, you have gone back 15 spaces. If you spun the same number each time, which number did you spin?

13 Write the coordinates of the points $A, B, C$, and $D$.


Simplify the expression.
(14) $11 \cdot m \cdot 10$

Evaluate the expression when $x=20$ and $y=-3$.
$153 x+2 y+2 x$

Use the distributive property to write an equivalent variable expression.
$163(3-2 x)$
$176(x+8)$

Simplify the expression.
$183 x+2(x-5)$

19 The perimeter of the triangle is 131 inches. Write an equation to find the side length labeled $x$. Then solve the equation.


Solve the equation. Check your solution.
20 $j-7=14$
$21 \quad 11=7+t$

22 A moving van weighing 13,500 pounds was loaded with furniture. The van stopped at a weigh station and the combined weight of the van and furniture was 14,955 pounds. How much did the furniture weigh?

Solve the equation.
$2354=6 y$
(24) $\frac{b}{10}=10$

Perform the indicated operation.
$25642.79+(-13.7)$
$264.06 \div 0.007$

27-4(1.94)

Solve the equation.
$286 g=4.8$
(29) $\frac{k}{7}=5.4$

## Mastery Test \#2 Review

## Answer Section

| 1 <br> 2 | 33 |
| :--- | :--- |
| $\mathbf{2}$ | 32 |
| $\mathbf{3}$ | -14 |
| 4 | -11 |
| $\mathbf{5}$ | -15 |
| $\mathbf{6}$ | $28^{\circ} \mathrm{C}$ |
| $\mathbf{7}$ | -5 |
| $\mathbf{8}$ | 276 |
| $\mathbf{9}$ | -60 |
| $\mathbf{1 0}$ | 51 |
| $\mathbf{1 1}$ | 343 cubic inches |
| $\mathbf{1 2}$ | -3 |
| $\mathbf{1 3}$ | $(-5,3),(1,5),(2,-1),(-5,-3)$ |
| $\mathbf{1 4}$ | $110 m$ |
| $\mathbf{1 5}$ | 94 |
| $\mathbf{1 6}$ | $9-6 x$ |
| $\mathbf{1 7}$ | $6 x+48$ |
| 18 | $5 x-10$ |
| $\mathbf{1 9}$ | $131=x+30+42 ; 59$ in. |
| 20 | 21 |
| 21 | 4 |
| 22 | 1455 pounds |
| 23 | 9 |
| 24 | 100 |
| 25 | 629.09 |
| 26 | 580 |
| 27 | -7.76 |
| 28 | 0.8 |
| 29 | 37.8 |

