$\qquad$
$\qquad$
$\qquad$

Write the expression modeled by each number line. Then find the sum.
1.

3.

2.

4.


Simplify each expression.
5. $6+(-4)$
6. $-2+(-13)$
7. $-18+4$
8. $15+(-32)$
9. $-27+(-14)$
10. $8+(-3)$
11. $-12.2+31.9$
12. $-2.3+(-13.9)$
13. $19.8+(-27.4)$
14. $\frac{1}{4}+\left(-\frac{3}{4}\right)$
15. $\frac{2}{3}+\left(-\frac{1}{3}\right)$
16. $-\frac{7}{12}+\frac{1}{6}$
17. $2 \frac{2}{3}+(-1)$
18. $-3 \frac{3}{4}+1 \frac{1}{2}$
19. $2 \frac{1}{3}+\left(-4 \frac{2}{3}\right)$
20. $-6.3+8.2$
21. $-3.82+2.83$
22. $-7.8+9$
23. The temperature at $5: 00 \mathrm{~A} . \mathrm{M}$. is $-38^{\circ} \mathrm{F}$. The temperature rises $20^{\circ}$ by 11:00 A.M. Use addition to find the temperature at 11:00 A.M.
24. A football team has possession of the ball on their own 15 -yd line.

The next two plays result in a loss of 7 yd and a gain of 3 yd , respectively. Use addition to find the position of the ball after the two plays.
25. Suppose your opening checking account balance is $\$ 124.53$. You write a check for $\$ 57.49$ and make a deposit of $\$ 103.49$. Use addition to find your new balance.
26. During an emergency exercise, a submarine dives 37 ft , rises 16 ft , and then dives 18 ft . Use addition to find the net change in the submarine's position after the second dive.

## Evaluate each expression for $\boldsymbol{m} \neq \mathbf{2} .5$.

27. $-m+1.6$
28. $-3.2+m$
29. $-2.5+(-m)$
30. $-m+(-4.1)$
31. $5.7+m$
32. $m+(-1.9)$

Simplify.
33. $-3+(-6)+14$
34. $4+(-8)+(-14)$
35. $2.7+(-3.2)+1.5$
36. $-2.5+(-1.2)+(-2.3)$
37. $\frac{1}{2}+\left(-\frac{1}{3}\right)+\frac{1}{4}$
38. $-\frac{2}{3}+\left(-\frac{1}{3}\right)+\left(-1 \frac{1}{3}\right)$
39. A hiker starts at an elevation of 542 feet. Define a variable and write an expression to find her elevation after it changes. Then evaluate your expression for each change.
a. an increase of 125 feet
b. a decrease of 31 feet
c. a decrease of 89 feet
d. an increase of 62 feet

