Translate into a variable expression.

1. the sum of 8 and $y$
2. $a$ less than 16
3. $t$ increased by 10
4. $p$ decreased by 7
5. $z$ added to 14
6. $q$ multiplied by 13
7. 20 less than the square of $x$
8. the sum of three-fourths of $n$ and 12
9. 8 increased by the quotient of $n$ and 4
10. the product of -8 and $y$
11. the product of 3 and the total of $y$ and 7
12. 8 divided by the difference between $x$ and 6
13. the product of $t$ and the sum of $t$ and 16
14. the quotient of 6 less than $n$ and twice $n$
15. 15 more than one-half of the square of $x$
16. 19 less than the product of $n$ and -2
17. the total of 5 times the cube of $n$ and the square of $n$
18. $r$ decreased by the quotient of $r$ and 3
19. four-fifths of the sum of $w$ and 10
20. the difference between the square of $x$ and the total of $x$ and 17
21. the product of 9 and the total of $z$ and 4
22. $s$ increased by the quotient of 4 and $s$
23. $n$ increased by the difference between 10 times $n$ and 9

## Translate into a variable expression. Then simplify.

27. twelve minus a number
28. two-thirds of a number
29. the quotient of twice a number and nine
30. eight less than the product of eleven and a number
31. nine less than the total of a number and two
32. the quotient of seven and the total of five and a number
33. five increased by one-half of the sum of a number and three
34. a number added to the difference between twice the number and four
35. the product of five less than a number and seven
36. the quotient of five more than twice a number and the number
37. a number decreased by the difference between three times the number and eight
38. a number divided by eighteen
39. twenty more than a number
40. ten times the difference between a number and fifty
41. the sum of five-eighths of a number and six
42. the difference between a number and three more than the number
43. four times the sum of a number and nineteen
44. the quotient of fifteen and the sum of a number and twelve
45. the product of two-thirds and the sum of a number and seven
46. the difference between forty and the quotient of a number and twenty
47. the sum of the square of a number and twice the number
48. the sum of eight more than a number and one-third of the number
