

# Translating Algebraic Phrases (B)

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Write an algebraic expression for each phrase.

1. the square of the quotient of a number  $z$  and thirty-one  
\_\_\_\_\_
2. the sum of a number  $d$  and its cube  
\_\_\_\_\_
3. the difference of a number  $n$  and itself  
\_\_\_\_\_
4. the quotient of a number  $y$  and itself  
\_\_\_\_\_
5. the sum of a number  $w$  and twenty-four to the power of four  
\_\_\_\_\_
6. four times the square of a number  $k$  divided by forty-one more than  $e$   
\_\_\_\_\_
7. the difference between the cube of a number  $m$  and forty-seven  
\_\_\_\_\_
8. a number  $v$  squared plus twice the same number minus seventy  
\_\_\_\_\_
9. the product of a number  $q$  and seventy-two is divided by seventy-six  
\_\_\_\_\_
10. the difference of the square root of a number  $p$  and eight  
\_\_\_\_\_
11. the square root of the difference of a number  $c$  and sixteen  
\_\_\_\_\_
12. the sum of a number  $f$  and itself  
\_\_\_\_\_
13. fifty-nine times the sum of a number  $g$  and thirty-one  
\_\_\_\_\_
14. half of the square root of a number  $h$   
\_\_\_\_\_
15. the product of a number  $t$  and itself  
\_\_\_\_\_
16. three fifths of a number  $x$  is subtracted from sixty-five  
\_\_\_\_\_
17. the sum of two fifths of a number  $s$  and twenty-two  
\_\_\_\_\_
18. the inverse of a number  $j$   
\_\_\_\_\_
19. seventy times the cube of the difference of a number  $b$  and thirty-nine  
\_\_\_\_\_
20. the product of a number  $r$  plus eighty-five and the same number minus forty-four  
\_\_\_\_\_

# Translating Algebraic Phrases (B) Answers

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Write an algebraic expression for each phrase.

- |                                                                                       |                               |
|---------------------------------------------------------------------------------------|-------------------------------|
| 1. the square of the quotient of a number $z$ and thirty-one                          | $\left(\frac{z}{31}\right)^2$ |
| 2. the sum of a number $d$ and its cube                                               | $d + d^3$                     |
| 3. the difference of a number $n$ and itself                                          | $0$                           |
| 4. the quotient of a number $y$ and itself                                            | $1$                           |
| 5. the sum of a number $w$ and twenty-four to the power of four                       | $(w + 24)^4$                  |
| 6. four times the square of a number $k$ divided by forty-one more than $e$           | $\frac{4k^2}{e+41}$           |
| 7. the difference between the cube of a number $m$ and forty-seven                    | $m^3 - 47$                    |
| 8. a number $v$ squared plus twice the same number minus seventy                      | $v^2 + 2v - 70$               |
| 9. the product of a number $q$ and seventy-two is divided by seventy-six              | $\frac{72q}{76}$              |
| 10. the difference of the square root of a number $p$ and eight                       | $\sqrt{p} - 8$                |
| 11. the square root of the difference of a number $c$ and sixteen                     | $\sqrt{c - 16}$               |
| 12. the sum of a number $f$ and itself                                                | $2f$                          |
| 13. fifty-nine times the sum of a number $g$ and thirty-one                           | $59(g + 31)$                  |
| 14. half of the square root of a number $h$                                           | $\frac{\sqrt{h}}{2}$          |
| 15. the product of a number $t$ and itself                                            | $t^2$                         |
| 16. three fifths of a number $x$ is subtracted from sixty-five                        | $65 - \frac{3}{5}x$           |
| 17. the sum of two fifths of a number $s$ and twenty-two                              | $\frac{2}{5}s + 22$           |
| 18. the inverse of a number $j$                                                       | $\frac{1}{j}$                 |
| 19. seventy times the cube of the difference of a number $b$ and thirty-nine          | $70(b - 39)^3$                |
| 20. the product of a number $r$ plus eighty-five and the same number minus forty-four | $(r + 85)(r - 44)$            |