Writing Algebraic Expressions TEKS *A.3.A, A.3.B*

To solve a problem using algebra, you often need to write a phrase as an algebraic expression.

EXAMPLE **Write the phrase as an algebraic expression.**

a. 6 less than a number

"Less than" indicates subtraction.

▶ $n - 6$

b. The cube of a number

"Cube" indicates raising to the third power.

▶ n^3

c. Double a number

"Double" indicates multiplication by 2.

▶ $2n$

EXAMPLE **Write an algebraic expression to answer the question.**

a. Rebecca walks three times as far to school as Meghan does. If Meghan walks m blocks to school, how many blocks to school does Rebecca walk?

▶ $3m$

b. Kate is 8 inches taller than Noah. If Noah is n inches tall, how tall is Kate?

▶ $n + 8$

PRACTICE

Write the phrase as an algebraic expression.

1. 8 more than a number
2. 10 times a number
3. Twice a number

4. 6 less than a number
5. One fifth of a number
6. 4 greater than a number

7. 5 times a number
8. A number squared
9. 25% of a number

10. Half a number
11. 2 less than a number
12. The square root of a number

Write an algebraic expression to answer the question.

13. Allison is 4 years younger than her sister Camille. If Camille is c years old, how old is Allison?

14. Ryan bought a movie ticket for x dollars. He paid with a $20 bill. How much change should Ryan get?

15. Bridget spent $5 more than Tom spent at the mall. If Tom spent x dollars, how much did Bridget spend?

16. Marc has twice as many baseball cards as hockey cards. If Marc has h hockey cards, how many baseball cards does he have?

17. Elizabeth's ballet class is 45 minutes long. If Elizabeth is m minutes late for ballet class, how many minutes will she spend in class?

18. Steve drove x miles per hour for 5 hours. How many miles did Steve drive?

19. Wendy bought 10 pens priced at x dollars each. How much did she spend?