Expressions and Variables

Write an expression. Find the value.

1. Mark had 6 books. He bought 5 more.

_____

2. Sara baked 9 cupcakes. Her sister ate 3 of them.

_____

3. Lillian got 3 letters in the mail. The next day she got 7 more.

_____

4. Luke had 15 grapes in his lunch. He gave away 4 of them.

_____

Write an expression with a variable. Explain what the variable represents.

5. TJ had 14 pet fish. He bought some more.

_____

6. Alex picked 25 apples. He ate some.

_____

Find the value of the expression.

7. $n + 37$ if n is 16

_____

8. $234 + n$ if n is 66

_____

For 9–10, choose the expression for each situation.

9. Joy rode down 5 floors on the elevator, and then rode up 3 floors.

A $f - 5 + 3$ **C** $5 + 3 = f$

B $f + 5 - 3$ **D** $f - 5 = 3$

10. Kim ate 3 of the 12 cookies, and then baked some more.

F $3 + 12 + n$ **H** $12 - n - 3$

G $12 - 3 + n$ **J** $9 + 3 + n$

Mixed Review

11. Use mental math to find the sum. $10 + 60 + 200 + 1{,}000$

_____

12. Write a number between 1.0 and 1.4

_____

Name _____

Write Equations

Write an equation for each. Explain what the variable represents.

1. Rick wants to read 52 books this year. He has already read 24 books. How many more should he read?

_____

_____

2. Jon saw 24 animals at the pet store. Fourteen were dogs and 3 were hamsters. How many other kinds of animals did he see?

_____

_____

3. There were 38 students in the choir. After 3 of the students moved away and 10 new students joined, how many students were in choir?

_____

_____

4. The buses departed with 39 students aboard. There were 32 students who waited for another bus. How many students are riding the buses?

_____

_____

5. Seven people joined the soccer team. The rest joined the softball team. There were 20 people that joined either the soccer or softball team. How many people joined the softball team?

_____

_____

_____

6. The theater group performed on Friday and Saturday nights. Three hundred and twenty four attended on Friday, and 33 more attended on Saturday. How many people saw the show?

_____

_____

_____

On a separate sheet of paper, write a problem for the equation. State what the variable n represents.

7. $54 - n = 24$

8. $n + 20 = 70$

9. $5 + n - 3 = 10$

10. $4 + n = 12$

11. $80 + n = 100$

12. $n + 36 = 80$

Mixed Review

13. $23 + 12$ _____

14. $56 + 12$ _____

15. $73 + 12$ _____

16. $90 - 80$ _____

17. $34 - 23$ _____

18. $15 + 73$ _____

19. $45 - 34$ _____

20. $23 + 32$ _____