2.4 Multiplication Property of Equality: Problem Type 1

• Example 1

Solve

$6x = 18$

Multiplying by $\frac{1}{6}$ on both sides of the equation, we get

$\frac{1}{6} \cdot 6x = \frac{1}{6} \cdot 18$

or, equivalently,

$x = 3.$

The solution is 3. To check, replace x with 3 in the equation $6x = 18$.

This gives $6 \cdot 3 = 18$, which is true.

CHECK YOURSELF 1

Solve and check.

$8x = 32$

CHECK YOURSELF ANSWER

1. 4.

2.4 Exercises

Name

Section Date

ANSWERS

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Solve for x and check your result.

1. $5x = 20$

2. $6x = 30$

3. $9x = 54$

4. $6x = -42$

5. $63 = 9x$

6. $66 = 6x$

7. $4x = -16$

8. $-3x = 27$

9. $-9x = 72$

10. $10x = -100$

11. $6x = -54$

12. $-7x = 49$

13. $-4x = -12$

14. $52 = -4x$

15. $-42 = 7x$

16. $-7x = -35$

17. $-6x = -54$

18. $-4x = -24$

19. $5x = 35$

20. $7x = -28$

21. $-6x = 24$

22. $-9x = -63$