



Name _____ Date _____

Estimation by Rounding (pages 12–15)

The rules for rounding are given below.

Rounding Whole Numbers	Look at the digit to the right of the place being rounded. <ul style="list-style-type: none"> • The digit remains the same if the digit to the right is 0, 1, 2, 3, or 4 (less than 5). • Round up if the digit to the right is 5, 6, 7, 8, or 9 (greater than or equal to 5).
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EXAMPLES

A Round 56 to the nearest ten.

Look at the digit to the right of the tens place. The digit is 6. The rules for rounding whole numbers say to round up if the digit to the right is 5, 6, 7, 8, or 9. So, round 56 up to the nearest ten, which is 60.

B Estimate the product of 52 and 5.

Round 52 to the nearest ten. The digit to the right of the tens place is less than 5 so round down to 50. Then, multiply 50×5 to get the estimate, 250.

Try These Together

1. Round 243 to the nearest hundred

HINT: 4 is less than 5. Round down.

2. Estimate the product of 97 and 4.

HINT: 7 is greater than 5. Round up.

PRACTICE

Round each number to the underlined place-value position.

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| 3. <u>5</u> 67 | 4. <u>4</u> 3 | 5. <u>8</u> 7 |
| 6. <u>3</u> 54 | 7. <u>2</u> 78 | 8. 1, <u>2</u> 69 |
| 9. <u>3</u> ,352 | 10. 9, <u>6</u> 84 | 11. <u>1</u> 51 |
| 12. <u>1</u> 34 | 13. <u>6</u> ,453 | 14. <u>5</u> ,123 |
| 15. <u>2</u> 4 | 16. <u>6</u> 8 | 17. 4, <u>5</u> 60 |

Estimate. State whether the answer shown is reasonable.

18. $12 \times 5 = 80$ 19. $77 - 11 = 66$ 20. $84 \div 2 = 42$

21. **Entertainment** Elise is going to a movie that costs \$5.25. She is planning to buy a snack for \$1.60. Estimate to the nearest dollar how much money she should bring with her.



22. **Standardized Test Practice** A male African elephant weighs about 15,400 pounds. A male Asian elephant weighs about 5,100 pounds. To the nearest thousand pounds, how much more does an African elephant weigh than an Asian elephant?

- A** 10,000 **B** 11,000 **C** 9,000 **D** 8,000

Answers: 1. 200 2. 400 3. 570 4. 40 5. 90 6. 400 7. 280 8. 1,300 9. 3,000 10. 9,680 11. 1,150 12. 100 13. 6,000 14. 5,000 15. 20 16. 70 17. 4,560 18. no 19. yes 20. yes 21. \$7 22. A