

Reteaching 4-1 Estimating Products and Quotients

You can estimate decimal products and quotients by using **compatible numbers**.

Estimate the product 9.47×3.81 .

$$\begin{array}{r} 9.47 \rightarrow 10 \\ \times 3.81 \rightarrow \times 4 \\ \hline \end{array} \quad \text{Change to compatible numbers—numbers that are easy to multiply.}$$

The product is about 40.

Estimate the quotient $23.96 \div 4.18$.

$$\begin{array}{r} 23.96 \div 4.18 \\ \downarrow \quad \downarrow \\ 24 \div 4 = 6 \end{array} \quad \text{Change to compatible numbers—numbers that are easy to divide.}$$

The quotient is about 6.

Write a pair of compatible numbers. Then estimate the product.

1. 3×4.1

_____ \times _____

Estimate: _____

2. 4.9×9.7

_____ \times _____

Estimate: _____

3. 7.8×5.4

_____ \times _____

Estimate: _____

4. 14.7×3.1

_____ \times _____

5. 1.86×9.7

_____ \times _____

6. 4.57×2.5

_____ \times _____

7. 45.79×3.76

_____ \times _____

8. $\$25.95 \times 4$

_____ \times _____

9. $\$19.90 \times 40$

_____ \times _____

10. 3.9×4.6

_____ \times _____

11. 6.157×14

_____ \times _____

12. 9.9×2.33

_____ \times _____

Use compatible numbers to estimate the quotient.

13. $7.21 \div 3$

_____ \div _____

14. $31.74 \div 5$

_____ \div _____

15. $34.06 \div 12.7$

_____ \div _____

16. $90.87 \div 33.6$

_____ \div _____

17. $51.7 \div 9.8$

_____ \div _____

18. $46.81 \div 8.7$

_____ \div _____

19. $63.11 \div 9.1$

_____ \div _____

20. $16.87 \div 7.9$

_____ \div _____

21. $43.01 \div 1.97$

_____ \div _____

22. $124.6 \div 25$

_____ \div _____

23. $80.02 \div 11$

_____ \div _____

24. $32.889 \div 6.74$

_____ \div _____