

Division: Quotient with a Remainder

• Example 1

Divide

$$205 \overline{)6585}$$

205 is greater than 65, but smaller than 658. How many times does 205 go into 658? Our estimate is 3.

$$\begin{array}{r} 3 \\ 205 \overline{)6585} \\ \underline{615} \\ 43 \end{array}$$

We multiply: $205 \times 3 = 615$, and subtract. Our estimate, 3, was correct because $43 < 205$.

Continue the process by bringing down 5, the last digit of the dividend.

$$\begin{array}{r} 3 \\ 205 \overline{)6585} \\ \underline{615} \\ 435 \end{array}$$

Our estimate for the last digit of the quotient is 2.

$$\begin{array}{r} 32 \\ 205 \overline{)6585} \\ \underline{615} \\ 435 \\ \underline{410} \\ 25 \end{array}$$

We multiply and subtract to complete the process.

$$6585 \div 205 = 32 \text{ r}25$$

$$\text{Check: } 6585 = 205 \times 32 + 25$$

• • • CHECK YOURSELF 1

Divide.

$$321 \overline{)7582}$$

• • • CHECK YOURSELF ANSWER

1. 23 r199.

1.25 Exercises

Name _____

Section _____

Date _____

A N S W E R S

1. _____

2. _____

3. _____

4. _____

5. _____

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11. _____

12. _____

13. _____

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16. _____

17. _____

18. _____

19. _____

20. _____

1. $763 \overline{)3871}$

3. $326 \overline{)7564}$

5. $432 \overline{)8770}$

7. $454 \overline{)32,751}$

9. $103 \overline{)21,185}$

11. $234 \overline{)125,000}$

13. $563 \overline{)2935}$

15. $329 \overline{)8527}$

17. $228 \overline{)69,750}$

19. $357 \overline{)147,100}$

2. $871 \overline{)4321}$

4. $229 \overline{)8312}$

6. $375 \overline{)7610}$

8. $527 \overline{)27,563}$

10. $205 \overline{)61,825}$

12. $179 \overline{)126,500}$

14. $218 \overline{)7473}$

16. $434 \overline{)35,202}$

18. $325 \overline{)275,000}$

20. $281 \overline{)6935}$