

0.1b Homework: Dividing Multi-Digit Numbers

Directions: Without calculating determine which of the following quotients are correct. Justify your answer.

1. $152 \div 14 = 2128$

2. $4508 \div 92 = 49$

3. $14880 \div 124 = 1200$

4. Marty manufactures special bolts for motorcycles in his garage. He has packaged 1 case, 5 boxes, 1 tube, and 2 individual bolts to be sent to 14 motorcycle shops. Marty packages 10 individual bolts in 1 tube, 10 tubes in one box, and 10 boxes per case. Draw a picture or model that represents how the bolts are packaged, and then determine how many cases, boxes, tubes, and individual bolts will be sent to each of the 14 motorcycle shops Explain why your answer makes sense.



Directions: Estimate each quotient. Then use the standard algorithm to find the exact quotient. Express remainders as decimals.

5. $78 \div 6$	6. $352 \div 16$	7. $540 \div 18$	8. $49,815 \div 405$	9. $578 \div 32$
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Directions: Estimate each quotient. Then use the standard algorithm to find the exact quotient. Express remainders as decimals.

10. $4,635 \div 45$	11. $6,996 \div 212$	12. $1,018 \div 72$	13. $326 \div 8$	14. $40613601 \div 4263$
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Find, Fix, and Justify

15. An airplane travels 18,032 miles in 45 hours. Pablo has completed the following division problem to determine the plane's speed in miles per hour and has made a mistake. Find the mistake and explain what Pablo has done wrong. Then solve the division problem correctly.

$$\begin{array}{r}
 47.\bar{1} \\
 45 \overline{)18032.00} \\
 \underline{-180} \\
 0320 \\
 \underline{-315} \\
 50 \\
 \underline{-45} \\
 50
 \end{array}$$

16. Monique has correctly found the quotient below doing long division. Use her work shown to find each product.

$$\begin{array}{r}
 172 \\
 24 \overline{)4128} \\
 \underline{-24} \\
 172 \\
 \underline{-168} \\
 48 \\
 \underline{-48} \\
 0
 \end{array}$$

a. 172×24

b. 70×24

c. 2×24