

Dividing by Two-Digit Divisors

Grade 5 Math • Section 2.3

Name: _____

Date: _____

Score: _____ / 17

Quick Review and Helpful Hints

Strategy: Estimate the quotient first using compatible numbers. Then use the standard long-division algorithm.

To estimate $2,856 \div 34$, think $2,800 \div 35 = 80$, so the answer is near 80.

Always multiply back to check: $\text{quotient} \times \text{divisor} + \text{remainder} = \text{dividend}$.

Example: Find $1,974 \div 42$.

Estimate: $2,000 \div 40 = 50$, so the answer is near 47. 42 goes into 197 four times ($42 \times 4 = 168$). Subtract: $197 - 168 = 29$. Bring down 4: 294. $42 \times 7 = 294$ exactly. Answer: 47.

Answer: 47

Practice Problems

Divide. Write the quotient and any remainder.

- | | | |
|----------------------------|-----------------------------|-----------------------------|
| 1. $858 \div 22 =$ _____ | 6. $4,368 \div 72 =$ _____ | 11. $7,488 \div 81 =$ _____ |
| 2. $1,440 \div 32 =$ _____ | 7. $2,730 \div 35 =$ _____ | 12. $2,484 \div 36 =$ _____ |
| 3. $2,576 \div 46 =$ _____ | 8. $5,016 \div 66 =$ _____ | 13. $4,032 \div 63 =$ _____ |
| 4. $3,024 \div 54 =$ _____ | 9. $1,904 \div 28 =$ _____ | 14. $6,375 \div 25 =$ _____ |
| 5. $1,125 \div 15 =$ _____ | 10. $3,510 \div 45 =$ _____ | 15. $3,192 \div 42 =$ _____ |

Word Problems

16. A factory packs 3,744 bottles into cases of 24. How many full cases can they fill? _____
17. A bus company needs to transport 1,890 students. Each bus holds 45 students. How many buses are needed? _____



Answer Keys

- | | |
|---|--|
| <p>1. 39</p> <p>2. 45</p> <p>3. 56</p> <p>4. 56</p> <p>5. 75</p> <p>6. 60 R 48</p> <p>7. 78</p> <p>8. 76</p> <p>9. 68</p> | <p>10. 78</p> <p>11. 92 R 36</p> <p>12. 69</p> <p>13. 64</p> <p>14. 255</p> <p>15. 76</p> <p>16. 156</p> <p>17. 42</p> |
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Step-by-Step Explanations

1. Start with the main idea. For dividing by two-digit divisors, divide 858 by 22. $858 \div 22 = 39$. Check division by multiplying the quotient back by the divisor.
2. Keep the work tidy. For dividing by two-digit divisors, divide 1,440 by 32. $1,440 \div 32 = 45$. A remainder means there was not enough left for one more full group.
3. Look at what the numbers mean. For dividing by two-digit divisors, divide 2,576 by 46. $2,576 \div 46 = 56$. Use estimation to choose a quotient that is close before you divide exactly.
4. Use the setup first. For dividing by two-digit divisors, divide 3,024 by 54. $3,024 \div 54 = 56$. Check division by multiplying the quotient back by the divisor.
5. Check the size of the answer. For dividing by two-digit divisors, divide 1,125 by 15. $1,125 \div 15 = 75$. A remainder means there was not enough left for one more full group.
6. Match the operation to the words. For dividing by two-digit divisors, divide 4,368 by 72. $4,368 \div 72 = 60$ remainder 48. Use estimation to choose a quotient that is close before you divide exactly.
7. Write the important values first. For dividing by two-digit divisors, divide 2,730 by 35. $2,730 \div 35 = 78$. Check division by multiplying the quotient back by the divisor.
8. Follow the pattern carefully. For dividing by two-digit divisors, divide 5,016 by 66. $5,016 \div 66 = 76$. A remainder means there was not enough left for one more full group.
9. Start with the main idea. For dividing by two-digit divisors, divide 1,904 by 28. $1,904 \div 28 = 68$. Use estimation to choose a quotient that is close before you divide exactly.
10. Keep the work tidy. For dividing by two-digit divisors, divide 3,510 by 45. $3,510 \div 45 = 78$. Check division by multiplying the quotient back by the divisor.
11. Look at what the numbers mean. For dividing by two-digit divisors, divide 7,488 by 81. $7,488 \div 81 = 92$ remainder 36. A remainder means there was not enough left for one more full group.
12. Use the setup first. For dividing by two-digit divisors, divide 2,484 by 36. $2,484 \div 36 = 69$. Use estimation to choose a quotient that is close before you divide exactly.
13. Check the size of the answer. For dividing by two-digit divisors, divide 4,032 by 63. $4,032 \div 63 = 64$. Check division by multiplying the quotient back by the divisor.
14. Match the operation to the words. For dividing by two-digit divisors, divide 6,375 by 25. $6,375 \div 25 = 255$. A remainder means there was not enough left for one more full group.
15. Write the important values first. For dividing by two-digit divisors, divide 3,192 by 42. $3,192 \div 42 = 76$. Use estimation to choose a quotient that is close before you divide exactly.
16. Follow the pattern carefully. For dividing by two-digit divisors, $3,744 \div 24 = 156$, so they can fill 156 full cases. Check division by multiplying the quotient back by the divisor.
17. Start with the main idea. For dividing by two-digit divisors, $1,890 \div 45 = 42$, so 42 buses are needed. A remainder means there was not enough left for one more full group.



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