

Long Division with 2-Digit Divisors

1 Use round numbers to estimate how many times 18 will divide into 77.

2

$$12 \overline{)276}$$

3

$$15 \overline{)195}$$

4

$$15 \overline{)1,230}$$

5

$$31 \overline{)7,440}$$

6

$$22 \overline{)8,030}$$

Long Division with 2-Digit Divisors

1 Use round numbers to estimate how many times 18 will divide into 77.

18 rounds to 20

77 rounds to 80

20 will divide into 80
exactly 4 times.

Estimate: 4

2

$$\begin{array}{r}
 23 \\
 12 \overline{)276} \\
 \underline{-24} \\
 36 \\
 \underline{-36} \\
 0
 \end{array}$$

3

$$\begin{array}{r}
 13 \\
 15 \overline{)195} \\
 \underline{-15} \\
 45 \\
 \underline{-45} \\
 0
 \end{array}$$

4

$$\begin{array}{r}
 82 \\
 15 \overline{)1,230} \\
 \underline{-120} \\
 30 \\
 \underline{-30} \\
 0
 \end{array}$$

5

$$\begin{array}{r}
 240 \\
 31 \overline{)7,440} \\
 \underline{-62} \\
 124 \\
 \underline{-124} \\
 0
 \end{array}$$

6

$$\begin{array}{r}
 365 \\
 22 \overline{)8,030} \\
 \underline{-66} \\
 143 \\
 \underline{-132} \\
 110 \\
 \underline{-110} \\
 0
 \end{array}$$

Estimating Division

A-2DD 1

Instructions: For each problem, use round numbers to estimate how many times the first number will divide into the second number. You can round each number to different a place value (ones, tens, hundreds) if it seems like it will make it easier to estimate. The first 3 have been done as examples.

Note: Answers may vary. When grading, because these are just estimates, the answers are not really right or wrong, but just closer to or farther from the estimate we made.

1 12 into 63
 ↓ ↓
 10 60
 Estimate: **6**
 5 or 7 would also be
 reasonable estimates

2 23 into 47
 ↓ ↓
 25 50
 Estimate: **2**
 1 or 3 would also be
 reasonable estimates

3 46 into 186
 ↓ ↓
 50 200
 Estimate: **4**
 3 or 5 would also be
 reasonable estimates

4 18 into 39

5 43 into 115

6 33 into 146

7 31 into 89

8 16 into 58

9 17 into 174

10 83 into 235

11 11 into 79

12 26 into 177

2-Digit Divisor Practice (Set 1)

A-2DD 2

Instructions: Divide. Follow the procedure you learned from the video. Remember, it's helpful to use estimating and some trial-and-error to figure out each division step.

$$\begin{array}{r} \text{1} \quad 10 \overline{)530} \\ \quad \underline{-50} \\ \quad \quad 30 \\ \quad \quad \underline{-30} \\ \quad \quad \quad 0 \end{array}$$

$$\text{2} \quad 20 \overline{)640}$$

$$\text{3} \quad 15 \overline{)3,015}$$

$$\text{4} \quad 14 \overline{)1,708}$$

$$\text{5} \quad 12 \overline{)3,708}$$

$$\text{6} \quad 19 \overline{)8,189}$$

2-Digit Divisor Practice (Set 2)

A-2DD 3

Instructions: Divide. Follow the procedure you learned from the video. Remember, it's helpful to use estimating and some trial-and-error to figure out each division step.

$$\begin{array}{r} 46 \\ 14 \overline{)644} \\ \underline{-56} \\ 84 \\ \underline{-84} \\ 0 \end{array}$$

$$21 \overline{)315}$$

$$25 \overline{)3,250}$$

$$32 \overline{)8,192}$$

$$13 \overline{)1,183}$$

$$21 \overline{)4,914}$$

Really Long 2-Digit Divisor Practice (Set 1)

A-2DD 4

Instructions: Divide. Follow the procedure you learned from the video. Remember, it's helpful to use estimating and some trial-and-error to figure out each division step.

1 $12 \overline{)43,824}$

2 $23 \overline{)32,936}$

3 $50 \overline{)31,700}$

4 $75 \overline{)903,225}$

Really Long 2-Digit Divisor Practice (Set 2)

A-2DD 5

Instructions: Divide. Follow the procedure you learned from the video. Remember, it's helpful to use estimating and some trial-and-error to figure out each division step.

1 $30 \overline{)94,350}$

2 $18 \overline{)43,794}$

3 $15 \overline{)675,420}$

4 $80 \overline{)188,560}$

Estimating Division

A-2DD 1

Instructions: For each problem, use round numbers to estimate how many times the first number will divide into the second number. You can round each number to different a place value (ones, tens, hundreds) if it seems like it will make it easier to estimate. The first 3 have been done as examples.

Note: Answers may vary. When grading, because these are just estimates, the answers are not really right or wrong, but just closer to or farther from the estimate we made.

1 12 into 63
 ↓ ↓
 10 60
 Estimate: **6**
 5 or 7 would also be reasonable estimates

2 23 into 47
 ↓ ↓
 25 50
 Estimate: **2**
 1 or 3 would also be reasonable estimates

3 46 into 186
 ↓ ↓
 50 200
 Estimate: **4**
 3 or 5 would also be reasonable estimates

4 18 into 39
 ↓ ↓
 20 40
 Estimate: **2**
 1 or 3 would also be reasonable estimates

5 43 into 115
 ↓ ↓
 40 120
 Estimate: **3**
 2 or 4 would also be reasonable estimates

6 33 into 146
 ↓ ↓
 30 150
 Estimate: **5**
 4 or 6 would also be reasonable estimates

7 31 into 89
 ↓ ↓
 30 90
 Estimate: **3**
 2 or 4 would also be reasonable estimates

8 16 into 58
 ↓ ↓
 15 60
 Estimate: **4**
 3 or 5 would also be reasonable estimates

9 17 into 174
 ↓ ↓
 17 170
 Estimate: **10**
 9 or 11 would also be reasonable estimates

10 83 into 235
 ↓ ↓
 80 240
 Estimate: **3**
 2 or 4 would also be reasonable estimates

11 11 into 79
 ↓ ↓
 10 80
 Estimate: **8**
 7 or 9 would also be reasonable estimates

12 26 into 177
 ↓ ↓
 25 175
 Estimate: **7**
 6 or 8 would also be reasonable estimates

2-Digit Divisor Practice (Set 1)

A-2DD 2

Instructions: Divide. Follow the procedure you learned from the video. Remember, it's helpful to use estimating and some trial-and-error to figure out each division step.

$$\begin{array}{r} 53 \\ 10 \overline{)530} \\ \underline{-50} \\ 30 \\ \underline{-30} \\ 0 \end{array}$$

$$\begin{array}{r} 32 \\ 20 \overline{)640} \\ \underline{-60} \\ 40 \\ \underline{-40} \\ 0 \end{array}$$

$$\begin{array}{r} 201 \\ 15 \overline{)3,015} \\ \underline{-30} \\ 015 \\ \underline{-15} \\ 0 \end{array}$$

$$\begin{array}{r} 122 \\ 14 \overline{)1,708} \\ \underline{-14} \\ 30 \\ \underline{-28} \\ 28 \\ \underline{-28} \\ 0 \end{array}$$

$$\begin{array}{r} 309 \\ 12 \overline{)3,708} \\ \underline{-36} \\ 108 \\ \underline{-108} \\ 0 \end{array}$$

$$\begin{array}{r} 431 \\ 19 \overline{)8,189} \\ \underline{-76} \\ 58 \\ \underline{-57} \\ 19 \\ \underline{-19} \\ 0 \end{array}$$

$$\begin{array}{r} 3 \\ 19 \\ \times 4 \\ \hline 76 \end{array}$$

$$\begin{array}{r} 2 \\ 19 \\ \times 3 \\ \hline 57 \end{array}$$

2-Digit Divisor Practice (Set 2)

A-2DD 3

Instructions: Divide. Follow the procedure you learned from the video. Remember, it's helpful to use estimating and some trial-and-error to figure out each division step.

$$\begin{array}{r} 46 \\ 14 \overline{)644} \\ \underline{-56} \\ 84 \\ \underline{-84} \\ 0 \end{array}$$

$$\begin{array}{r} 15 \\ 21 \overline{)315} \\ \underline{-21} \\ 105 \\ \underline{-105} \\ 0 \end{array}$$

$$\begin{array}{r} 130 \\ 25 \overline{)3,250} \\ \underline{-25} \\ 75 \\ \underline{-75} \\ 00 \end{array}$$

$$\begin{array}{r} 256 \\ 32 \overline{)8,192} \\ \underline{-64} \\ 179 \\ \underline{-160} \\ 192 \\ \underline{-192} \\ 0 \end{array}$$

$$\begin{array}{r} 1 \\ 32 \\ \times 5 \\ \hline 160 \end{array}$$

$$\begin{array}{r} 1 \\ 32 \\ \times 6 \\ \hline 192 \end{array}$$

$$\begin{array}{r} 91 \\ 13 \overline{)1,183} \\ \underline{-117} \\ 13 \\ \underline{-13} \\ 0 \end{array}$$

$$\begin{array}{r} 2 \\ 13 \\ \times 9 \\ \hline 117 \end{array}$$

$$\begin{array}{r} 234 \\ 21 \overline{)4,914} \\ \underline{-42} \\ 71 \\ \underline{-63} \\ 84 \\ \underline{-84} \\ 0 \end{array}$$

Really Long 2-Digit Divisor Practice (Set 1)

A-2DD 4

Instructions: Divide. Follow the procedure you learned from the video. Remember, it's helpful to use estimating and some trial-and-error to figure out each division step.

$$\begin{array}{r}
 3,652 \\
 12 \overline{)43,824} \\
 \underline{-36} \\
 78 \\
 \underline{-72} \\
 62 \\
 \underline{-60} \\
 24 \\
 \underline{-24} \\
 0
 \end{array}$$

$$\begin{array}{r}
 1,432 \\
 23 \overline{)32,936} \\
 \underline{-23} \\
 99 \\
 \underline{-92} \\
 73 \\
 \underline{-69} \\
 46 \\
 \underline{-46} \\
 0
 \end{array}$$

$$\begin{array}{r}
 634 \\
 50 \overline{)31,700} \\
 \underline{-300} \\
 170 \\
 \underline{-150} \\
 200 \\
 \underline{-200} \\
 0
 \end{array}$$

$$\begin{array}{r}
 12,043 \\
 75 \overline{)903,225} \\
 \underline{-75} \\
 153 \\
 \underline{-150} \\
 322 \\
 \underline{-300} \\
 225 \\
 \underline{-225} \\
 0
 \end{array}$$

Really Long 2-Digit Divisor Practice (Set 2)

A-2DD 5

Instructions: Divide. Follow the procedure you learned from the video. Remember, it's helpful to use estimating and some trial-and-error to figure out each division step.

$$\begin{array}{r}
 3,145 \\
 1 \quad 30 \overline{)94,350} \\
 \underline{-90} \\
 43 \\
 \underline{-30} \\
 135 \\
 \underline{-120} \\
 150 \\
 \underline{-150} \\
 0
 \end{array}$$

$$\begin{array}{r}
 2,433 \\
 2 \quad 18 \overline{)43,794} \\
 \underline{-36} \\
 77 \\
 \underline{-72} \\
 59 \\
 \underline{-54} \\
 54 \\
 \underline{-54} \\
 0
 \end{array}
 \quad
 \begin{array}{r}
 3 \\
 18 \\
 \times 4 \\
 \hline
 72 \\
 \\
 2 \\
 18 \\
 \times 3 \\
 \hline
 54
 \end{array}$$

$$\begin{array}{r}
 45,028 \\
 3 \quad 15 \overline{)675,420} \\
 \underline{-60} \\
 75 \\
 \underline{-75} \\
 042 \\
 \underline{-30} \\
 120 \\
 \underline{-120} \\
 0
 \end{array}
 \quad
 \begin{array}{r}
 4 \\
 15 \\
 \times 8 \\
 \hline
 120
 \end{array}$$

$$\begin{array}{r}
 2,357 \\
 4 \quad 80 \overline{)188,560} \\
 \underline{-160} \\
 285 \\
 \underline{-240} \\
 456 \\
 \underline{-400} \\
 560 \\
 \underline{-560} \\
 0
 \end{array}$$