

Division

Skill 4 - 15A

Estimating Quotients with Two-digit Divisors

Where do you place the first digit?	There is another way.	Divide, Multiply, Subtract, Compare	Divide, Multiply, Subtract, Compare
$18 \overline{)396}$ <p>Compare. $3 < 18$ 18 goes into 3 zero times. Compare. $39 > 18$. How many times does 18 go into 39? $18 \times 2 = 36$ $18 \times 3 = 54$ You can see that 18 goes into 36 two times. So place the number 2 in the quotient in the tens place.</p>	<p>You can estimate to place the first digit. Round 396 to 400 Round 18 to 20. $400 \div 20 = 20$ $40 \div 20 = 2$</p> 2 $18 \overline{)396}$ <p>So you would place the number 2 in the tens place. When you estimate, your guess may be too high or too low. This will be explained later.</p>	2 $18 \overline{)396}$ $\underline{-36}$ 36 <p>Multiply. 18×2 Subtract. $39 - 36$ Compare. $36 > 18$</p>	22 $18 \overline{)396}$ $\underline{-36}$ 36 $\underline{-36}$ 0 <p>How many times does 18 go into 36? $18 \times 2 = 36$ 18 goes into 36 two times.</p>

Where do you place the first digit?	Multiply 4×54	Subtract to find the remainder.	Check your answer.
$54 \overline{)189}$ <p>54 goes into 18 zero times. Estimate to see how many times 54 goes into 189. $200 \div 50 = 4$</p>	4 $54 \overline{)189}$ $\underline{-216}$ <p>This estimate is too high since $216 > 189$</p> <p>Now, try to correct the quotient. Since 4 is too high try 3.</p>	$3 \text{ r}27$ $54 \overline{)189}$ $\underline{-162}$ 27 <p>$3 \times 54 = 162$ This is correct since $54 > 27$</p>	54 $\times 3$ $\underline{162}$ $+ 27$ $\underline{189}$

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Directions: Divide and use multiplication to check your answer.

1. $24 \overline{)756}$	Check	2. $38 \overline{)165}$	Check	3. $15 \overline{)325}$	Check
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4. $18 \overline{)360}$	Check	5. $30 \overline{)995}$	Check	6. $33 \overline{)417}$	Check
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7. $60 \overline{)126}$	Check	8. $22 \overline{)652}$	Check	9. $31 \overline{)856}$	Check
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Estimating Quotients with Two-digit Divisors**Directions:** Divide and use multiplication to check your answer.

10. $34 \overline{)597}$	Check	11. $32 \overline{)648}$	Check	12. $24 \overline{)705}$	Check
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13. $68 \overline{)729}$	Check	14. $12 \overline{)249}$	Check	15. $26 \overline{)129}$	Check
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16. $17 \overline{)536}$	Check	17. $35 \overline{)655}$	Check	18. $19 \overline{)785}$	Check
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Answers: Skill 15A Grade 4

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| 1. 31 r12 | 2. 4 r13 | 3. 21 r10 | 4. 20 | 5. 33 r5 | 6. 12 r21 |
| 7. 2 r6 | 8. 29 r14 | 9. 27 r19 | 10. 17 r19 | 11. 20 r8 | 12. 29 r9 |
| 13. 10 r49 | 14. 20 r9 | 15. 4 r25 | 16. 31 r9 | 17. 18 r25 | 18. 41 r6 |