

Multiplication

Skill 3 - 17C

Estimate Products: Front-End Estimation

Two ways to estimate

Use rounding	Use front-end estimation
Round to the nearest hundred	Use the front digit of a number and write zeros for the other digits.
$\begin{array}{r} 564 \\ \times 3 \\ \hline \end{array}$ $\begin{array}{r} 600 \\ \times 3 \\ \hline 1,800 \end{array}$	$\begin{array}{r} 564 \\ \times 3 \\ \hline \end{array}$ $\begin{array}{r} 500 \\ \times 3 \\ \hline 1,500 \end{array}$

Directions: Estimate each product. Use front-end estimation. Problems 1 and 2 are examples. Complete problem 3.

1. $\begin{array}{r} 357 \\ \times 7 \\ \hline \end{array}$ $\begin{array}{r} 300 \\ \times 7 \\ \hline 2,100 \end{array}$	2. $\begin{array}{r} 249 \\ \times 4 \\ \hline \end{array}$ $\begin{array}{r} 200 \\ \times 4 \\ \hline 800 \end{array}$	3. $\begin{array}{r} 518 \\ \times 3 \\ \hline \end{array}$ $\begin{array}{r} 500 \\ \times 3 \\ \hline \end{array}$
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Directions: Estimate each product. Use front-end estimation. Problems 4 and 5 are examples. Complete problem 6.

4. $\begin{array}{r} 2,450 \\ \times 3 \\ \hline \end{array}$ $\begin{array}{r} 2,000 \\ \times 3 \\ \hline 6,000 \end{array}$	5. $\begin{array}{r} 5,691 \\ \times 5 \\ \hline \end{array}$ $\begin{array}{r} 5,000 \\ \times 5 \\ \hline 25,000 \end{array}$	6. $\begin{array}{r} 4,330 \\ \times 2 \\ \hline \end{array}$ $\begin{array}{r} 4,000 \\ \times 2 \\ \hline \end{array}$
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Directions: Estimate each product. Use front-end estimation.

7. $\begin{array}{r} 214 \\ \times 7 \\ \hline \end{array}$	8. $\begin{array}{r} 457 \\ \times 4 \\ \hline \end{array}$	9. $\begin{array}{r} 344 \\ \times 3 \\ \hline \end{array}$	10. $\begin{array}{r} 673 \\ \times 6 \\ \hline \end{array}$
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11. $\begin{array}{r} 1,235 \\ \times 3 \\ \hline \end{array}$	12. $\begin{array}{r} 4,374 \\ \times 5 \\ \hline \end{array}$	13. $\begin{array}{r} 3,635 \\ \times 2 \\ \hline \end{array}$	14. $\begin{array}{r} 7,392 \\ \times 3 \\ \hline \end{array}$
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Name _____

Date _____

Multiplication

Skill 3 - 17C

Estimate Products: Front-End Estimation

Directions: Estimate each product. Use front-end estimation.

15. $\begin{array}{r} 917 \\ \times 2 \\ \hline \end{array}$	16. $\begin{array}{r} 272 \\ \times 5 \\ \hline \end{array}$	17. $\begin{array}{r} 760 \\ \times 2 \\ \hline \end{array}$	18. $\begin{array}{r} 421 \\ \times 3 \\ \hline \end{array}$
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19. $\begin{array}{r} 7,280 \\ \times 2 \\ \hline \end{array}$	20. $\begin{array}{r} 5,601 \\ \times 5 \\ \hline \end{array}$	21. $\begin{array}{r} 1,346 \\ \times 3 \\ \hline \end{array}$	22. $\begin{array}{r} 3,392 \\ \times 3 \\ \hline \end{array}$
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27. $\begin{array}{r} 150 \\ \times 8 \\ \hline \end{array}$	28. $\begin{array}{r} 279 \\ \times 9 \\ \hline \end{array}$	29. $\begin{array}{r} 638 \\ \times 3 \\ \hline \end{array}$	30. $\begin{array}{r} 522 \\ \times 4 \\ \hline \end{array}$
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31. $\begin{array}{r} 8,550 \\ \times 2 \\ \hline \end{array}$	32. $\begin{array}{r} 6,500 \\ \times 5 \\ \hline \end{array}$	33. $\begin{array}{r} 5,280 \\ \times 3 \\ \hline \end{array}$	34. $\begin{array}{r} 2,720 \\ \times 3 \\ \hline \end{array}$
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35. $\begin{array}{r} 329 \\ \times 5 \\ \hline \end{array}$	36. $\begin{array}{r} 451 \\ \times 2 \\ \hline \end{array}$	37. $\begin{array}{r} 280 \\ \times 3 \\ \hline \end{array}$	38. $\begin{array}{r} 310 \\ \times 4 \\ \hline \end{array}$
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Answer Key
Skill 3 - 17C

1. $\begin{array}{r} 357 \\ \times 7 \\ \hline \end{array}$ $\begin{array}{r} 300 \\ \times 7 \\ \hline 2,100 \end{array}$	2. $\begin{array}{r} 249 \\ \times 4 \\ \hline \end{array}$ $\begin{array}{r} 200 \\ \times 4 \\ \hline 800 \end{array}$	3. $\begin{array}{r} 518 \\ \times 3 \\ \hline \end{array}$ $\begin{array}{r} 500 \\ \times 3 \\ \hline 1,500 \end{array}$	4. $\begin{array}{r} 2,450 \\ \times 3 \\ \hline \end{array}$ $\begin{array}{r} 2,000 \\ \times 3 \\ \hline 6,000 \end{array}$	5. $\begin{array}{r} 5,691 \\ \times 5 \\ \hline \end{array}$ $\begin{array}{r} 5,000 \\ \times 5 \\ \hline 25,000 \end{array}$	6. $\begin{array}{r} 4,330 \\ \times 2 \\ \hline \end{array}$ $\begin{array}{r} 4,000 \\ \times 2 \\ \hline \end{array}$
7. $\begin{array}{r} 214 \\ \times 7 \\ \hline \end{array}$ $\begin{array}{r} 200 \\ \times 7 \\ \hline 1,400 \end{array}$	8. $\begin{array}{r} 457 \\ \times 4 \\ \hline \end{array}$ $\begin{array}{r} 400 \\ \times 4 \\ \hline 1,600 \end{array}$	9. $\begin{array}{r} 344 \\ \times 3 \\ \hline \end{array}$ $\begin{array}{r} 300 \\ \times 3 \\ \hline 900 \end{array}$	10. $\begin{array}{r} 673 \\ \times 6 \\ \hline \end{array}$ $\begin{array}{r} 600 \\ \times 6 \\ \hline 3,600 \end{array}$		
11. $\begin{array}{r} 1,235 \\ \times 3 \\ \hline \end{array}$ $\begin{array}{r} 1,200 \\ \times 3 \\ \hline 3,600 \end{array}$	12. $\begin{array}{r} 4,374 \\ \times 5 \\ \hline \end{array}$ $\begin{array}{r} 4,000 \\ \times 5 \\ \hline 20,000 \end{array}$	13. $\begin{array}{r} 3,635 \\ \times 2 \\ \hline \end{array}$ $\begin{array}{r} 3,000 \\ \times 2 \\ \hline 6,000 \end{array}$	14. $\begin{array}{r} 7,392 \\ \times 3 \\ \hline \end{array}$ $\begin{array}{r} 7,000 \\ \times 3 \\ \hline 21,000 \end{array}$		
15. $\begin{array}{r} 917 \\ \times 2 \\ \hline \end{array}$ $\begin{array}{r} 900 \\ \times 2 \\ \hline 1,800 \end{array}$	16. $\begin{array}{r} 272 \\ \times 5 \\ \hline \end{array}$ $\begin{array}{r} 200 \\ \times 5 \\ \hline 1,000 \end{array}$	17. $\begin{array}{r} 760 \\ \times 2 \\ \hline \end{array}$ $\begin{array}{r} 700 \\ \times 2 \\ \hline 1,400 \end{array}$	18. $\begin{array}{r} 421 \\ \times 3 \\ \hline \end{array}$ $\begin{array}{r} 400 \\ \times 3 \\ \hline 1,200 \end{array}$		
19. $\begin{array}{r} 7,280 \\ \times 2 \\ \hline \end{array}$ $\begin{array}{r} 7,000 \\ \times 2 \\ \hline 14,000 \end{array}$	20. $\begin{array}{r} 5,601 \\ \times 5 \\ \hline \end{array}$ $\begin{array}{r} 5,000 \\ \times 5 \\ \hline 25,000 \end{array}$	21. $\begin{array}{r} 1,346 \\ \times 3 \\ \hline \end{array}$ $\begin{array}{r} 1,000 \\ \times 3 \\ \hline 3,000 \end{array}$	22. $\begin{array}{r} 3,392 \\ \times 3 \\ \hline \end{array}$ $\begin{array}{r} 3,000 \\ \times 3 \\ \hline 9,000 \end{array}$		
23. $\begin{array}{r} 150 \\ \times 8 \\ \hline \end{array}$ $\begin{array}{r} 100 \\ \times 8 \\ \hline 800 \end{array}$	24. $\begin{array}{r} 279 \\ \times 9 \\ \hline \end{array}$ $\begin{array}{r} 200 \\ \times 9 \\ \hline 1,800 \end{array}$	25. $\begin{array}{r} 638 \\ \times 3 \\ \hline \end{array}$ $\begin{array}{r} 600 \\ \times 3 \\ \hline 1,800 \end{array}$	26. $\begin{array}{r} 522 \\ \times 4 \\ \hline \end{array}$ $\begin{array}{r} 500 \\ \times 4 \\ \hline 2,000 \end{array}$		
27. $\begin{array}{r} 8,550 \\ \times 2 \\ \hline \end{array}$ $\begin{array}{r} 8,000 \\ \times 2 \\ \hline 16,000 \end{array}$	28. $\begin{array}{r} 6,500 \\ \times 5 \\ \hline \end{array}$ $\begin{array}{r} 6,000 \\ \times 5 \\ \hline 30,000 \end{array}$	29. $\begin{array}{r} 5,280 \\ \times 3 \\ \hline \end{array}$ $\begin{array}{r} 5,000 \\ \times 3 \\ \hline 15,000 \end{array}$	30. $\begin{array}{r} 2,720 \\ \times 3 \\ \hline \end{array}$ $\begin{array}{r} 2,000 \\ \times 3 \\ \hline 6,000 \end{array}$		
31. $\begin{array}{r} 329 \\ \times 5 \\ \hline \end{array}$ $\begin{array}{r} 300 \\ \times 5 \\ \hline 1,500 \end{array}$	32. $\begin{array}{r} 310 \\ \times 4 \\ \hline \end{array}$ $\begin{array}{r} 300 \\ \times 4 \\ \hline 1,200 \end{array}$	33. $\begin{array}{r} 280 \\ \times 3 \\ \hline \end{array}$ $\begin{array}{r} 200 \\ \times 3 \\ \hline 600 \end{array}$	34. $\begin{array}{r} 451 \\ \times 3 \\ \hline \end{array}$ $\begin{array}{r} 400 \\ \times 3 \\ \hline 1,200 \end{array}$		
35. $\begin{array}{r} 329 \\ \times 5 \\ \hline \end{array}$ $\begin{array}{r} 300 \\ \times 5 \\ \hline 1,500 \end{array}$	36. $\begin{array}{r} 451 \\ \times 2 \\ \hline \end{array}$ $\begin{array}{r} 400 \\ \times 2 \\ \hline 800 \end{array}$	37. $\begin{array}{r} 280 \\ \times 3 \\ \hline \end{array}$ $\begin{array}{r} 200 \\ \times 3 \\ \hline 600 \end{array}$	38. $\begin{array}{r} 310 \\ \times 4 \\ \hline \end{array}$ $\begin{array}{r} 300 \\ \times 4 \\ \hline 1,200 \end{array}$		