

Multiplication Methods

Method A (Grid Multiplication):

$$52 \times 37 = ?$$

	50	2	
30	1500	60	1500
			350
			60
7	350	14	+ 14
			1924

Method B (Decomposition):

$$52 \times 37 = ?$$

$$52 \times 3 = 156$$

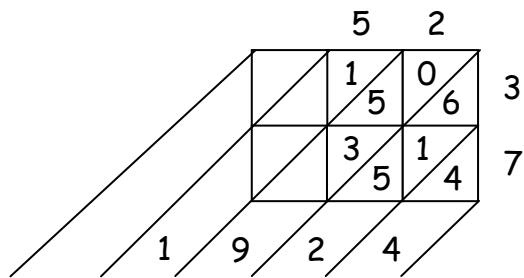
$$52 \times 30 = 1560$$

$$52 \times 7 = 364$$

$$\begin{array}{r} 1560 \\ + 364 \\ \hline 1924 \end{array}$$

Method C (Chinese Multiplication):

$$52 \times 37 = ?$$



Method D (Long Multiplication):

$$52 \times 37 = ?$$

$$\begin{array}{r} 52 \\ \times 37 \\ \hline 1560 \\ + 364 \\ \hline 1924 \end{array}$$

Method E (Egyptian Multiplication):

$$52 \times 37 = ?$$

1	37
2	74
4	148
8	296
16	592
32	1184

$$52 = 32 + 16 + 4$$

$$148 + 592 + 1184 = 1924$$

Method F (Russian Multiplication):

$$52 \times 37 = ?$$

52	37
26	74
13	148
6	296
3	592
1	1184

$$148 + 592 + 1184 = 1924$$

<p><u>Activity 1:</u> Choose the method most familiar to you. Discuss the method and make sure you understand how it works.</p>	<p><u>Activity 2:</u> Choose one method and try it out for 27×69. Check that you get 1863.</p>
<p><u>Activity 3:</u> Try out two different methods for 45×68. Check you get the same answer for both methods.</p>	<p><u>Activity 4:</u> Use one method for 387×73. Check your answer by comparing it with someone else who has done it independently.</p>
<p><u>Activity 5:</u> Choose two different methods and discuss what is similar about them and what makes one method easier.</p>	<p><u>Activity 6:</u> Discuss all six methods and make sure you understand how they all work.</p>

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