

COMPATIBLE NUMBERS

What are compatible numbers?

Compatible numbers are numbers that are easy to compute using the four basic operations: addition, subtraction, multiplication, or division. Compatible numbers help you do mental math. It involves rounding numbers to the nearest tens, hundreds, thousands, or ten thousand. For this reason it helps in solve estimating questions.

Example:

Find the sum of 512 and 419.

To solve this we must first round the numbers to the nearest tens or hundreds. In this example we round it up to the nearest tens.

$$\begin{array}{rcl} \textcircled{1} & & \\ 512 & \longrightarrow & 510 \\ + 419 & \longrightarrow & + 420 \\ \hline 931 & & 930 \end{array}$$

930 is close to 931

Let do some questions using the four basic operations.

1. Find the sum of 227, 16 and 235.

Actual Numbers	Rounding Numbers	Compatible Numbers
227		
16		
+ 235		

2. Find the sum of 43 and 54

Actual Numbers	Rounding Numbers	Compatible Numbers
$\begin{array}{r} 43 \\ + 54 \\ \hline \end{array}$		

3. $7314 - 1435$

Actual Numbers	Rounding Numbers	Compatible Numbers

4. Find the product of 25 and 62

Actual Numbers	Rounding Numbers	Compatible Numbers
$\begin{array}{r} 25 \\ \times 62 \\ \hline \end{array}$		

5. Find the product of 47 and 36. Round up to the nearest tens.

Actual Numbers	Rounding Numbers	Compatible Numbers
$\begin{array}{r} 25 \\ \times 62 \\ \hline \end{array}$		

6. Divide 678 by 43. Round up to the nearest tens.

ANSWER _____

7. Type the compatible statement and answer.

$$1268 \div 14 = \underline{\hspace{2cm}} \div 10 = \underline{\hspace{2cm}}$$

$$941 \times 18 = \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$84 + 67 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{ note: round up to tens.}$$

$$84 + 67 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{ note: bump up to the 5s}$$

$$425 - 84 = 425 - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$