

Name _____ Date _____



Multiplication Alternative Algorithm

Step 1: Write a list of easy facts for the divisor.

Step 2: Subtract from the dividend an easy multiple of the divisor (e.g. 10x, 100x, 200x etc). Record the partial quotient in a column to the right of the problem.

Step 3: Repeat until the dividend has been reduced to zero or the remainder is less than the divisor.

Step 4: Add up the partial quotients to find the answer

Example: $3683 \div 16$

Easy Facts for 16

$10 \times 16 = 160$	$100 \times 16 = 1600$
$20 \times 16 = 320$	$200 \times 16 = 3200$
$30 \times 16 = 480$	

$$\begin{array}{r} 230 \text{ r}3 \\ 16 \overline{) 3683} \\ \underline{- 3200} \\ 483 \\ \underline{- 320} \\ 163 \\ \underline{- 160} \\ 3 \end{array} \quad \begin{array}{l} 200 \times 16 \\ 20 \times 16 \\ 10 \times 16 \end{array}$$

Now you can try some problems on your own.

1. $3292 \div 16 =$

2. $3624 \div 17 =$

3. $3155 \div 15 =$

4. $2929 \div 14 =$

5. $6835 \div 17 =$

6. $3973 \div 13 =$

7. $4836 \div 16 =$

8. $3919 \div 19 =$

9. $4591 \div 15 =$

10. $4834 \div 16 =$