

## Dividing with the “Big 7” (called this because the enclosure looks like a large 7)

Using the “Big 7” in division can be helpful because you can use LANDMARK NUMBERS to solve your problem. It is helpful to remember that, just like multiplication is repeated addition, **DIVISION IS REPEATED SUBTRACTION**.

Divisor – The number you are dividing by

Quotient – The answer

Dividend – The number you are dividing

$$6 \overline{)324}$$

Here are the steps to take when using the “Big 7”:

1. **Divide:** Ask yourself, “What is the highest multiple of the divisor that will go into the dividend?”

Hint: Use LANDMARK NUMBERS: Will it go in 10 times? 20 times? Etc.

$$6 \overline{)324} \quad 6 \times 50$$

2. **Multiply** the numbers. Write the equation on the outside of the “7” to help you keep track of your work.

$$6 \overline{)324} \quad 6 \times 50$$
$$\quad \quad \quad 300$$

3. **Subtract** the amount.

$$6 \overline{)324} \quad 6 \times 50$$
$$\quad \quad \quad \underline{-300}$$
$$\quad \quad \quad \quad 24$$

4. **Repeat** this process until your remainder can no longer be divided by the divisor.

$$6 \overline{)324} \quad 6 \times 50$$
$$\quad \quad \quad \underline{-300}$$
$$\quad \quad \quad \quad 24$$
$$\quad \quad \quad \underline{-24} \quad 6 \times 4$$
$$\quad \quad \quad \quad \quad 0$$

5. **Add** up the numbers of the groups you were able to divide. This is your answer, or the quotient.

*Notice how the divisor (6) is consistently written as a factor on the outside of the “Big 7.”*

$$6 \overline{)324} \quad 6 \times 50$$
$$\quad \quad \quad \underline{-300}$$
$$\quad \quad \quad \quad 24$$
$$\quad \quad \quad \underline{-24} \quad 6 \times 4$$
$$\quad \quad \quad \quad \quad 0 \quad 6 \times 54$$