

Grade 5

LESSON 3 - DIVISION



DIVISION

6 boxes contain a total of 60 pencils.
How many pencils are in each box?

Check:



Multiplication and Division

$$15 \cdot 3 = 45$$



$$45 \div 3 = 15$$

$$45 \div 15 = 3$$

To determine the unknown multiple, we need to divide the product by the other multiple.

Division Properties



1. $p \div s = q \Leftrightarrow p = s \cdot q, \quad s = p \div q ;$

2. $p \div 1 = p ;$

3. $0 \div s = 0 ;$

4. $s \div s = 1 ;$

5. $p \div 0$ – impossible;

6. $(a + b) \div c = a \div c + b \div c ;$

7. $a \div (b \cdot c) = (a \div b) \div c .$

$$344 \div 8 = (320 + 24) \div 8 = (320 \div 8) + (24 \div 8) = 40 + 3 = 43$$

$$\begin{array}{r} \begin{array}{r} \text{—} \ 344 \\ \text{—} \ 32 \\ \hline \end{array} \bigg| \begin{array}{r} 8 \\ \hline 43 \end{array} \\ \begin{array}{r} \text{—} \ 24 \\ \hline \end{array} \\ \begin{array}{r} \text{—} \ 24 \\ \hline \end{array} \\ 0 \end{array}$$

$$\begin{array}{ccccc} 344 & \div & 8 & = & 43 \\ \text{divisor} & & \text{dividend} & & \text{quotient} \end{array}$$

$$963 \div 9 = (900 + 63) \div 9 = (900 \div 9) + (63 \div 9) = 100 + 7 = 107$$

Dividing by 10, 100, 1000

To divide a number by 10, remove one zero from the right of the original number.

To divide by 100 - remove two zeros.

To divide by 1000 - remove three zeros.

$$6\ 000 \div 10 = 600 ;$$

$$6\ 000 \div 100 = 60 ;$$

$$6\ 000 \div 1\ 000 = 6 .$$



Division with remainder

$$a = b \times c + r \quad \text{where } r \text{ is less than } b$$

$$20 \div 9$$



GRADE 5 LESSON 3 COMPLETED



CONTINUE TO GRADE 5 LESSON 4