

### 31.1 Division - Worksheet 1

1 Draw a diagram that shows the calculation  $24 \div 6$  using the concept of making groups.

2 Draw a diagram that shows the calculation  $24 \div 6$  using the concept of equal distribution.

3 Draw a diagram that shows the calculation  $21 \div 3$  using the concept of making groups.

4 Draw a diagram that shows the calculation  $21 \div 3$  using the concept of equal distribution.

## 31.2 Division - Worksheet 2

1 Draw a diagram that shows the calculation  $15 \div 3$  using the concept of making groups.

2 Draw a diagram that shows the calculation  $15 \div 3$  using the concept of equal distribution.

3 Draw a diagrams that represent the product  $3 \cdot 5$  as 3 groups of 5 and as 3 groups of 5.

4 Based on the diagrams that you've created, pair up each division concept with one of the  $A$  groups of  $B$  diagrams. This shows how both division concepts represent the same multiplication calculation.

### 31.3 Division - Worksheet 3

1 Determine the value of  $248 \div 4$ , showing your work as described in this section.

2 Determine the value of  $252 \div 7$ , showing your work as described in this section.

3 Determine the value of  $1432 \div 4$ , showing your work as described in this section.

Notice that you can go bigger than groups of 40.

4 Practice your mental arithmetic by performing the following calculations.

$114 \div 3 =$

$385 \div 5 =$

$192 \div 8 =$

$294 \div 6 =$

$266 \div 7 =$

$423 \div 9 =$

$738 \div 6 =$

$2358 \div 3 =$

$2198 \div 7 =$

## 31.4 Division - Worksheet 4

1 Determine the value of  $532 \div 14$ , showing your work as described in this section.

Follow the logic and do not be afraid that you are dividing by a two-digit number.

2 Determine the value of  $598 \div 13$ , showing your work as described in this section.

3 Determine the value of  $756 \div 21$ , showing your work as described in this section.

4 Determine the value of  $990 \div 18$ , showing your work as described in this section.

## 31.5 Division - Worksheet 5

1 Sometimes, a division calculation is “close” to being something extremely easy. For example, the calculation  $495 \div 5$  is very close an easily calculated  $500 \div 5$ . But since it’s easy to see that  $500 \div 5$  is 100 and that 495 is one group of 5 less than 500, it is not too difficult to see that  $495 \div 5 = 99$  (1 group short of 100 groups of 5).

This method of finding approximate answers and adjusting is commonly done in mental arithmetic when it’s possible. But it’s a good way to quickly calculate the answer in those situations.

Practice your mental arithmetic by performing the following calculations.

$297 \div 3 =$

$995 \div 5 =$

$792 \div 8 =$

$1194 \div 6 =$

$2691 \div 9 =$

$693 \div 7 =$

$1592 \div 8 =$

$2093 \div 7 =$

$1996 \div 4 =$

2 It’s not always the case that the number will be “one away” from a nice value. Sometimes, it may be two or three away. But with some practice and experience, you can learn to spot those values, too.

Practice your mental arithmetic by performing the following calculations.

$1490 \div 5 =$

$1782 \div 6 =$

$392 \div 4 =$

$882 \div 9 =$

$3486 \div 7 =$

$1188 \div 6 =$

$1491 \div 3 =$

$1576 \div 8 =$

$5982 \div 6 =$

3 Sometimes the “nice” value isn’t quite as nice, but is still helpful. Instead of being near a multiples of 100, these are examples that are near multiples of 10. The same ideas still apply. These are a bit trickier because you really need to be comfortable with your multiplication table to do it.

$195 \div 5 =$

$236 \div 4 =$

$343 \div 7 =$

$354 \div 6 =$

$312 \div 8 =$

$342 \div 9 =$

$476 \div 7 =$

$531 \div 9 =$

$456 \div 8 =$

This isn’t a race! Focus on thinking through the process carefully and correctly.