

## Grade 5 Commutative and associative properties Memo

1. Show that the commutative property is true by solving each of these problems two ways. An example is shown.

Example:      Question:       $4 + 3$   
                  Answer:       $4 + 3 = 7$        $3 + 4 = 7$

a.  $5 + 14 = 19$        $14 + 5 = 19$   
b.  $9 \times 5 = 45$        $5 \times 9 = 45$

2. Show that the associative property is true by solving each of these problems in two ways.

a.  $4 + 3 + 7$                        $4 + 3 + 7$   
     $= 7 + 7$                            $= 4 + 10$   
     $= 14$                                $= 14$   
b.  $3 \times 2 \times 8$                        $3 \times 2 \times 8$   
     $= 6 \times 8$                            $= 3 \times 16$   
     $= 48$                                $= 48$

3. Solve these as simply as you can – they are deliberately set up in a way that should make using the associative property the easiest, but you may use whichever method you choose.

Example:       $7 \times \underline{5 \times 2}$   
                   $= 7 \times 10$   
                   $= 70$

a.  $8 + 3 + 17$   
     $= 8 + 20$   
     $= 28$   
b.  $2 \times 3 \times 9$   
     $= 6 \times 9$   
     $= 54$   
c.  $4 + 7 + 16$   
     $= 7 + 20$   
     $= 27$   
d.  $6 \times 4 \times 5$   
     $= 6 \times 20$   
     $= 120$   
e.  $5 + 4 + 26$   
     $= 5 + 30$   
     $= 35$   
f.  $4 \times 5 \times 10$   
     $= 20 \times 10$   
     $= 200$