

WorksheetCloud Memo

Grade 4

Maths

Shortcuts with Addition and Multiplication

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. $9 + 13 = 22$ $13 + 9 = 22$
b. $6 \times 7 = 42$ $7 \times 6 = 42$

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

a. $9 + 3 + 7$ $9 + 3 + 7$
 $= 12 + 7$ $= 9 + 10$
 $= 19$ $= 19$
b. $5 \times 2 \times 8$ $5 \times 2 \times 8$
 $= 10 \times 8$ $= 5 \times 16$
 $= 80$ $= 80$

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. $7 + 4 + 16$
 $= 7 + 20$
 $= 27$
b. $2 \times 4 \times 9$
 $= 8 \times 9$
 $= 72$
c. $4 + 9 + 16$
 $= 9 + 20$
 $= 29$
d. $6 \times 4 \times 5$
 $= 6 \times 20$
 $= 120$
e. $7 + 2 + 28$
 $= 7 + 30$
 $= 37$
f. $4 \times 5 \times 3$
 $= 20 \times 3$
 $= 60$