

Numbers, Operations and Relationships

Properties of Whole Numbers - Memo

1. Say whether the following mathematical statements are true or false:

a) $34 + 46 = 46 + 34$

True

b) $34 + 46 = 46 - 34$

False

c) $12 + 10 + 11 = 10 + 11 + 12$

True

d) $1 \times 2 \times 3 = 3 \times 2 \times 1$

True

e) $40 \times 1 = 40 \times 0$

False

f) $40 \times 0 = 40 + 0$

False

g) $58 \times 1 = 58 + 0$

True

h) $4(10 - 6) = 4 \times 10 - 4 \times 6$

True

i) $10 \times (4 \times 9) = (10 \times 9) \times 4$

True

j) $20 - 18 = 18 - 20$

False

k) $34 + 70 = 70 + 34$

True

l) $72 - 61 = 72 + 61$

False

m) $24 + 1 = 24 \times 1$

False

n) $24 + 1 = 24 + 0$

False

o) $24 \times 1 = 24 + 0$

True

p) $64 + 5 + 1 = 64 - 5 - 1$

False

q) $7 \times 2 \times 5 = 5 \times 2 \times 7$

True

r) $7 \times 8 \times 1 = 7 \times 8 \times 0$

False

s) $8 \times (1 \times 3) = (8 \times 3) \times 1$

True

t) $5(6 + 4) = 5 \times 6 + 5 \times 4$

True

2. Write down the answers to each of the following:

a) 7×1
 $= 7$

b) 7×0
 $= 0$

c) $7 + 1$
 $= 8$

d) $7 + 0$
 $= 7$

e) $24 + 10$
 $= 34$

f) 24×10
 $= 240$

g) 24×0
 $= 0$

h) $24 + 1$
 $= 25$

i) 24×1
 $= 24$

3. Rearrange each of these sums so that they are easier to answer

Here is an example:

$$\begin{aligned} 3 \times 6 + 3 \times 4 &= 3 \times (6 + 4) \\ &= 3 \times 10 \\ &= 30 \end{aligned}$$

a) $4 \times 5 + 5 \times 16$
 $= 5 \times (4 + 16)$
 $= 5 \times 20$
 $= 100$

b) $4 + 9 + 5$
 $= 4 + 5 + 9$
 $= 9 + 9$
 $= 18$

c) $3 \times 16 - 3 \times 5$
 $= 3 \times (16 - 5)$
 $= 3 \times 11$
 $= 33$

d) $3 \times 4 \times 6$
 $= 12 \times 6$
 $= 72$

e) $6 \times 12 - 6 \times 2$
 $= 6 \times (12 - 2)$
 $= 6 \times 10$
 $= 60$

f) $8 + 7 + 2$
 $= 8 + 2 + 7$
 $= 10 + 7$
 $= 17$