

Order of Operations 2: More practice!

Remember to write out the sum in changed form underneath the original question. Do ONE STEP at a time!

Q1. Only one change.

- | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|
| a) $2 + 2 \times 3 =$ | b) $4 \times 2 + 1 =$ | c) $6 + 4 \div 4 =$ | d) $4 + 5 \times 1 =$ |
| e) $9 \div 3 - 1 =$ | f) $16 + 2 \times 3 =$ | g) $11 - 10 \div 5 =$ | h) $45 \div 9 - 2 =$ |
| i) $17 - 4 \times 3 =$ | j) $50 \div 10 + 1 =$ | k) $(3 + 2) \times 4 =$ | l) $3 \times (2 + 5) =$ |
| m) $3 + 1 + 3 - 2 =$ | n) $5 - 4 + 2 =$ | o) $8 - (3 \times 2) =$ | p) $2 \times 3 \div 2 =$ |
| q) $9 + 3 \times 2 =$ | r) $65 - 3 \times 6 =$ | s) $10 - 3 \times 2 =$ | t) $90 \div (6 + 4) =$ |
| u) $5 + 5 - 2 =$ | v) $4 \times 3 \div 2 =$ | w) $13 + 3 \times 9 =$ | x) $9 - 20 \div 5 =$ |
| y) $6 - 54 \div 9 =$ | z) $34 + 7 \times 8 =$ | A) $23 - 5 \times 4 =$ | B) $65 \div 5 + 2 =$ |
| C) $5 + 7 \times 6 =$ | D) $34 - 5 \times 6 =$ | E) $3 \times 4 \div 2 =$ | F) $120 \div (6 + 4) =$ |
| G) $33 - 3 \times 10 =$ | H) $7 + 3 \times 9 =$ | I) $88 \div (7 + 4) =$ | J) $(9 + 3) \div 6 =$ |
| K) $11 + 4 \times 2 =$ | L) $90 - 8 \times 7 =$ | M) $100 + 5 \times 9 =$ | N) $39 \div (9 + 4) =$ |
| O) $67 + 3 \times 11 =$ | P) $12 + 12 \times 4 =$ | Q) $95 - 95 \div 5 =$ | R) $33 + 33 \div 3 =$ |
| S) $203 + 15 \times 5 =$ | T) $86 + 42 \div 6 =$ | U) $102 + 7 \times 8 =$ | V) $63 \div (7 + 2) =$ |
| W) $200 \div (14 + 6) =$ | X) $56 \div (10 - 2) =$ | Y) $2 \times 3 + 56 =$ | Z) $44 + 4 \times 11 =$ |

Q2. These questions have three operations. You need to identify which one(s) are to be done first, then do those in the correct order. Remember that **x and \div** are a pair, and **+ and -** are a pair.

- | | | | |
|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------------|
| a) $3 \times 2 + 3 \times 2 =$ | b) $4 \times 1 + 2 \times 7 =$ | c) $5 \times 9 - 2 \times 6 =$ | d) $1 \times 9 - 3 \times 2 =$ |
| e) $6 \times 3 - 2 \times 4 =$ | f) $7 \times 6 + 3 \times 9 =$ | g) $9 \times 8 - 8 \times 9 =$ | h) $5 \times 5 + 2 \times 9 =$ |
| i) $64 \div 8 + 3 \times 2 =$ | j) $90 \div 10 - 5 \times 1 =$ | k) $54 \div 6 + 3 \times 7 =$ | l) $4 + 2 \times 1 + 3 =$ |
| m) $56 \div 7 + 4 \times 2 =$ | n) $30 - 2 \times 2 + 5 =$ | o) $5 \times 3 - 24 \div 6 =$ | p) $88 \div 11 - 2 \times 3 =$ |
| q) $65 \div 5 - 2 \times 1 =$ | r) $(3 + 6) \times 2 + 5 =$ | s) $(12 - 4) \times 8 - 3 =$ | t) $(3 + 4) \times 5 - 11 =$ |
| u) $53 - 2 \times (4 + 1) =$ | v) $2 + 4 \times (9 - 3) =$ | w) $34 + 9 \times (11 - 3) =$ | x) $67 - 4 \times (2 + 3) =$ |
| y) $23 + 3 \times (16 - 9) =$ | z) $11 + 2 \times (7 + 5) =$ | A) $100 - 88 \div (5 + 6) =$ | B) $9 + 12 \div (6 + 6) =$ |
| C) $12 + 2 \times 3 - 3 \times 1 =$ | D) $3 \times 2 + 3 \times 4 - 5 =$ | E) $65 - 3 \times 4 + 3 \times 2 =$ | F) $4 - 2 \times 2 =$ |
| G) $89 - 8 \times 9 - 9 =$ | H) $77 + 7 \times 6 - 6 \times 6 =$ | I) $4 - 3 \times 4 + 5 \times 1 =$ | J) $9 \times 3 - 4 \times 5 =$ |

K) $5 \times 2 \times 3 - 2 \times 4 =$

L) $16 - 2 - 3 + 4 =$

M) $44 \div 11 \div 2 + 5 =$

N) $90 - 20 - 10 + 2 =$

O) $6 \times 2 - 3 \times 2 =$

P) $(3 + 2 \times 3) \div 9 - 1 =$

Q) $6 - 2 \times 2 + 4 \times 2 =$

R) $78 - 7 \times 8 - 7 =$

Q3. Last, some nested brackets. Remember to go to the innermost bracket first and then solve your way outwards.

a) $((3 + 2) \times 2 - 4) \div 3 =$

b) $((3 + 5) \times 3 - 20) \times 3 =$

c) $9 \times ((2 + 3) \times 2 - 4) =$

d) $40 \div (2 + 2 \times (10 - 6)) =$

e) $((6 + 2) \div 4 - 1) \times 9 =$

f) $11 \times (3 + (2 + 7) \times 3) =$

SOLUTIONS

Q1. a) 8 b) 9 c) 7 d) 9 e) 2 f) 22 g) 9 h) 3 i) 5 j) 6 k) 20 l) 15 m) 5 n) 3 o) 2 p) 3 q) 15 r) 47 s) 4 t) 9 u) 8 v) 6 w) 40 x) 5 y) 0 z) 90 A) 3 B) 15 C) 47 D) 30 E) 6 F) 12 G) 3 H) 34 I) 8 J) 2 K) 19 L) 34 M) 145 N) 3 O) 100 P) 60 Q) 76 R) 44 S) 278 T) 93 U) 158 V) 7 W) 10 X) 7 Y) 62 Z) 88 Questions 2 and 3 will be marked by the teacher upon submission of this work.