

ANSWER

COMMUTATIVE PROPERTY OF ADDITION

CHANGE THE ORDER AND SOLVE (SHOW YOUR WORK)

$$\begin{aligned} 1. \quad & 12 + 5 + 8 \\ & 12 + 8 + 5 \\ & 12 + 13 \\ & 25 \end{aligned}$$

$$\begin{aligned} 6. \quad & 90 + 21 + 1 \\ & 1 + 21 + 90 \\ & 22 + 90 \\ & 112 \end{aligned}$$

$$\begin{aligned} 2. \quad & 16 + 28 + 52 \\ & 28 + 16 + 52 \\ & 44 + 52 \\ & 96 \end{aligned}$$

$$\begin{aligned} 7. \quad & 16 + 5 + 20 \\ & 5 + 20 + 16 \\ & 21 + 20 \\ & 41 \end{aligned}$$

$$\begin{aligned} 3. \quad & 10 + 6 + 2 \\ & 2 + 10 + 6 \\ & 12 + 6 \\ & 18 \end{aligned}$$

$$\begin{aligned} 8. \quad & 39 + 7 + 2 \\ & 2 + 39 + 7 \\ & 41 + 7 \\ & 48 \end{aligned}$$

$$\begin{aligned} 4. \quad & 28 + 60 + 15 \\ & 60 + 28 + 15 \\ & 60 + 43 \\ & 103 \end{aligned}$$

$$\begin{aligned} 9. \quad & 40 + 26 + 8 \\ & 8 + 40 + 26 \\ & 48 + 26 \\ & 74 \end{aligned}$$

$$\begin{aligned} 5. \quad & 22 + 18 + 4 \\ & 18 + 22 + 4 \\ & 40 + 4 \\ & 44 \end{aligned}$$

$$\begin{aligned} 10. \quad & 7 + 5 + 2 \\ & 2 + 7 + 5 \\ & 9 + 5 \\ & 14 \end{aligned}$$

COMMUTATIVE PROPERTY OF MULTIPLICATION

CHANGE THE ORDER AND SOLVE (SHOW YOUR WORK)

$$\begin{aligned} 1. \quad & 42 \times 16 \times 2 \\ & 16 \times 42 \times 2 \\ & 16 \times 84 \\ & 1344 \end{aligned}$$

$$\begin{aligned} 2. \quad & 20 \times 31 \times 4 \\ & 31 \times 4 \times 20 \\ & 124 \times 20 \\ & 2480 \end{aligned}$$

$$\begin{aligned} 3. \quad & 42 \times 10 \times 6 \\ & 6 \times 42 \times 10 \\ & 252 \times 10 \\ & 2520 \end{aligned}$$

$$\begin{aligned} 4. \quad & 20 \times 18 \times 9 \\ & 9 \times 20 \times 18 \\ & 180 \times 18 \\ & 3240 \end{aligned}$$

$$\begin{aligned} 5. \quad & 50 \times 11 \times 5 \\ & 5 \times 11 \times 50 \\ & 55 \times 50 \\ & 2750 \end{aligned}$$

$$\begin{aligned} 6. \quad & 90 \times 15 \times 4 \\ & 15 \times 4 \times 90 \\ & 60 \times 90 \\ & 5400 \end{aligned}$$

$$\begin{aligned} 7. \quad & 70 \times 26 \times 12 \\ & 26 \times 12 \times 70 \\ & 312 \times 70 \\ & 21840 \end{aligned}$$

$$\begin{aligned} 8. \quad & 25 \times 22 \times 10 \\ & 10 \times 25 \times 22 \\ & 250 \times 22 \\ & 5500 \end{aligned}$$

$$\begin{aligned} 9. \quad & 5 \times 8 \times 7 \\ & 8 \times 5 \times 7 \\ & 40 \times 7 \\ & 280 \end{aligned}$$

$$\begin{aligned} 10. \quad & 6 \times 18 \times 15 \\ & 15 \times 6 \times 18 \\ & 90 \times 18 \\ & 1620 \end{aligned}$$

ASSOCIATIVE PROPERTY OF ADDITION**REGROUP AND SOLVE (SHOW YOUR WORK)**

$$\begin{aligned} 1. & (21 + 8) + 6 \\ & 21 + (8 + 6) \\ & 21 + 14 \\ & 35 \end{aligned}$$

$$\begin{aligned} 2. & 16 + (20 + 4) \\ & (16 + 20) + 4 \\ & 36 + 4 \\ & 40 \end{aligned}$$

$$\begin{aligned} 3. & 42 + (11 + 2) \\ & (42 + 11) + 2 \\ & 53 + 2 \\ & 55 \end{aligned}$$

$$\begin{aligned} 4. & (22 + 15) + 10 \\ & 22 + (15 + 10) \\ & 22 + 25 \\ & 47 \end{aligned}$$

$$\begin{aligned} 5. & 40 + (4 + 16) \\ & (40 + 4) + 16 \\ & 44 + 16 \\ & 60 \end{aligned}$$

$$\begin{aligned} 6. & 7 + (16 + 18) \\ & (7 + 16) + 18 \\ & 23 + 18 \\ & 41 \end{aligned}$$

$$\begin{aligned} 7. & (10 + 23) + 6 \\ & 10 + (23 + 6) \\ & 10 + 29 \\ & 39 \end{aligned}$$

$$\begin{aligned} 8. & 25 + (18 + 4) \\ & (25 + 18) + 4 \\ & 43 + 4 \\ & 47 \end{aligned}$$

$$\begin{aligned} 9. & (17 + 9) + 10 \\ & 17 + (9 + 10) \\ & 17 + 19 \\ & 36 \end{aligned}$$

$$\begin{aligned} 10. & 5 + (16 + 9) \\ & (5 + 16) + 9 \\ & 20 + 9 \\ & 29 \end{aligned}$$

ASSOCIATIVE PROPERTY OF MULTIPLICATION**REGROUP AND SOLVE (SHOW YOUR WORK)**

$$\begin{aligned} 1. & (14 \times 12) \times 2 \\ & 14 \times (12 \times 2) \\ & 14 \times 24 \\ & 336 \end{aligned}$$

$$\begin{aligned} 2. & 20 \times (3 \times 10) \\ & (20 \times 3) \times 10 \\ & 60 \times 10 \\ & 600 \end{aligned}$$

$$\begin{aligned} 3. & (16 \times 4) \times 15 \\ & 16 \times (4 \times 15) \\ & 16 \times 20 \\ & 320 \end{aligned}$$

$$\begin{aligned} 4. & 25 \times (12 \times 16) \\ & (25 \times 12) \times 16 \\ & 300 \times 16 \\ & 4800 \end{aligned}$$

$$\begin{aligned} 5. & 14 \times (13 \times 2) \\ & (14 \times 13) \times 2 \\ & 182 \times 2 \\ & 364 \end{aligned}$$

$$\begin{aligned} 6. & (16 \times 4) \times 5 \\ & 16 \times (4 \times 5) \\ & 16 \times 20 \\ & 320 \end{aligned}$$

$$\begin{aligned} 7. & (30 \times 7) \times 5 \\ & 30 \times (7 \times 5) \\ & 30 \times 35 \\ & 1050 \end{aligned}$$

$$\begin{aligned} 8. & 10 \times (6 \times 11) \\ & (10 \times 6) \times 11 \\ & 60 \times 11 \\ & 660 \end{aligned}$$

$$\begin{aligned} 9. & 22 \times (16 \times 18) \\ & (22 \times 16) \times 18 \\ & 352 \times 18 \\ & 6336 \end{aligned}$$

$$\begin{aligned} 10. & 10 \times (2 \times 6) \\ & (10 \times 6) \times 2 \\ & 60 \times 2 \\ & 120 \end{aligned}$$

CHANGE THE ORDER, GROUP, AND SOLVE(SHOW YOUR WORK)

$$\begin{aligned} 1. & 6 + 2 + 5 + 8 \\ & 8 + 2 + 5 + 6 \\ & (8 + 2) + (5 + 6) \\ & 10 + 11 \\ & 21 \end{aligned}$$

$$\begin{aligned} 2. & 16 + 8 + 6 + 2 \\ & 8 + 2 + 16 + 6 \\ & (8 + 2) + (16 + 6) \\ & 10 + 22 \\ & 32 \end{aligned}$$

$$\begin{aligned} 3. & 20 + 2 + 17 + 7 \\ & 17 + 20 + 2 + 7 \\ & (17 + 20) + (2 + 7) \\ & 37 + 9 \\ & 46 \end{aligned}$$

$$\begin{aligned} 4. & 10 + 2 + 5 + 3 \\ & 3 + 10 + 5 + 2 \\ & (3 + 10) + (5 + 2) \\ & 13 + 7 \\ & 20 \end{aligned}$$

$$\begin{aligned} 5. & 27 + 22 + 11 + 4 \\ & 4 + 22 + 11 + 27 \\ & (4 + 22) + (11 + 27) \\ & 26 + 38 \\ & 64 \end{aligned}$$

$$\begin{aligned} 6. & 15 + 14 + 12 + 2 \\ & 14 + 2 + 15 + 12 \\ & (14 + 2) + (15 + 12) \\ & 16 + 27 \\ & 43 \end{aligned}$$

CHANGE THE ORDER, GROUP, AND SOLVE(SHOW YOUR WORK)

$$\begin{aligned} 1. & 10 \times 4 \times 12 \times 20 \\ & 4 \times 20 \times 10 \times 12 \\ & (4 \times 20) \times (10 \times 12) \\ & 80 \times 120 \\ & 9600 \end{aligned}$$

$$\begin{aligned} 2. & 2 \times 15 \times 18 \times 60 \\ & 18 \times 2 \times 15 \times 60 \\ & (18 \times 2) \times (15 \times 60) \\ & 36 \times 900 \\ & 32400 \end{aligned}$$

$$\begin{aligned} 3. & 50 \times 5 \times 4 \times 10 \\ & 50 \times 10 \times 4 \times 5 \\ & (50 \times 10) \times (4 \times 5) \\ & 500 \times 20 \\ & 10000 \end{aligned}$$

$$\begin{aligned} 4. & 7 \times 8 \times 2 \times 11 \\ & 2 \times 11 \times 8 \times 7 \\ & (2 \times 11) \times (8 \times 7) \\ & 22 \times 56 \\ & 1232 \end{aligned}$$

$$\begin{aligned} 5. & 16 \times 30 \times 4 \times 3 \\ & 30 \times 3 \times 4 \times 16 \\ & (30 \times 3) \times (4 \times 16) \\ & 90 \times 64 \\ & 5760 \end{aligned}$$

$$\begin{aligned} 6. & 25 \times 15 \times 10 \times 5 \\ & 15 \times 10 \times 25 \times 5 \\ & (15 \times 10) \times (25 \times 5) \\ & 150 \times 125 \\ & 18750 \end{aligned}$$