Answer Key

Check Your Understanding – Expressions and Equations

Evaluate (solve) the expressions according to the order of operations.

1. $3 \times 2 + 5$ 11
2. $4 \times 3 + 2$ 14
3. $9 + 3 \times 4$ 21
4. $7 - 3 \times 2$ 1
5. $15 - 5 \times 3$ 0
6. $20 \div 4 \times 3$ 15
7. $3 \times 4 + 2 \times 5$ 22
8. $25 \div 5 - 4 \times 1$ 1

Create at least two expressions of each number using two or more different operations.

10 $5 \times 4 - 10$ $13 + 14 \div 2$	**5** $22 - 12 \div 2$ $2 + 3 \times 1$	**20** $4 \times 10 \div 2$ $100 \div 5 \times 1$
15 $10 + 8 - 3$ $40 \div 2 - 5$	**30** $3 \times 5 \times 2$ $15 \times 3 - 15$	**100** $50 + 200 \div 4$ $25 \times 2 + 50$

Check Your Understanding – Expressions and Equations (part 2)

Are the following equations balanced? Write Yes or No beside each example.

1. $2 \times 5 = 3 + 7$ yes
2. $6 + 4 = 2 \times 5$ yes
3. $9 - 4 = 16 \div 2$ no
4. $4 \times 3 = 2 \times 6$ yes
5. $20 + 4 = 9 \times 3$ no
6. $3 \times 4 = 2 \times 6$ yes
7. $8 + 2 = 3 + 7$ yes
8. $20 \div 5 = 2 \times 2$ yes
9. $10 \div 2 = 4 \times 2$ no
10. $15 \div 3 = 5 \times 1$ yes
11. $5 \times 5 = 3 \times 8 + 1$ yes
12. 12. $10 \div 2 = 5 + 2$ no

Write the new equation and circle yes or no under each example below.

1. Subtract 3 from both sides of the equation. Is it still balanced? $6 = 6$

   $6-3=6-3$ (Yes) / No

2. Subtract 2 from both sides of the equation. Is it still balanced? $3 \times 3 = 9$

   $3 \times 3 - 2 = 9 - 2$ (Yes) / No

3. Add 4 to both sides of the equation. Is it still balanced? $7 - 2 = 5$

   $7 - 2 + 4 = 5 + 4$ (Yes) / No

Use preservation of equality to solve the following equations. You may use a calculator. If you do, you must write down exactly what you put into the calculator. Either way, show your work.

$2 + \underline{4} = 6$	$\underline{8} - 3 = 5$	$\underline{2.5} \times 2 = 5$
$40 \div \_\_\_ = 10$	$\underline{6.2} + 5.8 = 12.0$	$\underline{9.9} \div 3 = 3.3$