

## 4.OA.A.3 Order of Operations and Filling Numbers

4.OA.A.3: Solve multistep word problems posed with whole numbers using the four operations.

1. Find the value of each expression. Make sure that you use correct order of operation.

- a.  $80 - 11 \times 3 - 5$
- b.  $15 \div 3 + 28 \div 7$
- c.  $12 \times 3 - 36 \div 12$
- d.  $3 \times 7 - 25 \div 5 + 8$
- e.  $3 + 44 \div 11 \times 2 - 5$
- f.  $6 + 42 \div 6 \times 2 - 5$
- g.  $27 \div 9 \times 4 - 3 + 9$
- h.  $8 \times 4 + 16 \div 4 + 7$

Solution:

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_
- d. \_\_\_\_\_
- e. \_\_\_\_\_
- f. \_\_\_\_\_
- g. \_\_\_\_\_
- h. \_\_\_\_\_

2. Use the numbers listed to fill in the missing numbers to make a true number sentence.

- a. 2, 5, and 8  $\rightarrow$  \_\_\_\_\_  $\times$  \_\_\_\_\_  $+$  \_\_\_\_\_  $= 18$
- b. 3 and 18  $\rightarrow$  \_\_\_\_\_  $\div$  \_\_\_\_\_  $= 6$
- c. 3, 8, and 25  $\rightarrow$  \_\_\_\_\_  $-$  \_\_\_\_\_  $+$  \_\_\_\_\_  $= 30$
- d. 8, 9, and 3  $\rightarrow$  \_\_\_\_\_  $\times$  \_\_\_\_\_  $+$  \_\_\_\_\_  $= 75$
- e. 3, 4, and 5  $\rightarrow$  \_\_\_\_\_  $\times$  \_\_\_\_\_  $-$  \_\_\_\_\_  $= 11$
- f. 4, 12, and 20  $\rightarrow$  \_\_\_\_\_  $\div$  \_\_\_\_\_  $+$  \_\_\_\_\_  $\div$  \_\_\_\_\_  $= 8$
- g. 3, 9, and 48  $\rightarrow$  \_\_\_\_\_  $\times$  \_\_\_\_\_  $+$  \_\_\_\_\_  $\div$  \_\_\_\_\_  $= 43$

Solution:

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_
- d. \_\_\_\_\_
- e. \_\_\_\_\_
- f. \_\_\_\_\_
- g. \_\_\_\_\_

3. If Ethan wins a game, seven tickets are given to him. If he loses, he must return four tickets. How many tickets does he receive, if he wins 5 games and loses 3?

Solution:

4. Lyn buys 3 bouquets of flowers for \$13 each. He pays with four \$10 bills. How much money does he have left?

Solution:

5. Pola buys 3 hamster pets for \$5 each. She also buys 9 kilograms of pet food. One kilogram costs \$2. Ceasar buys 4 hamster pets for \$4 each. He buys 7 kilograms of the same pet food. Who spent more money and by how much?

Solution:

6. What is the value of expression  $63 \div 7 - 12 + 5 \times 8 \div 4$ ?

- A. 27
- B. 45
- C. 7
- D. None of the above

Solution:

## 4.OA.A.3 Order of Operations and Filling Numbers

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### Answer Key

1. Find the value of each expression. Make sure that you use correct order of operation.

- $80 - 11 \times 3 - 5$
- $15 \div 3 + 28 \div 7$
- $12 \times 3 - 36 \div 12$
- $3 \times 7 - 25 \div 5 + 8$
- $3 + 44 \div 11 \times 2 - 5$
- $6 + 42 \div 6 \times 2 - 5$
- $27 \div 9 \times 4 - 3 + 9$
- $8 \times 4 + 16 \div 4 + 7$

**Solution:**

- $80 - 33 - 5 = 47 - 5 = 42$
- $5 + 4 = 9$
- $36 - 3 = 33$
- $21 - 5 + 8 = 16 + 8 = 24$
- $3 + 4 \times 2 - 5 = 3 + 8 - 5 = 6$
- $6 + 7 \times 2 - 5 = 6 + 14 - 5 = 15$
- $3 \times 4 - 3 + 9 = 12 - 3 + 9 = 18$
- $32 + 4 + 7 = 36 + 7 = 43$

2. Use the numbers listed to fill in the missing numbers to make a true number sentence.

- 2, 5, and 8  $\rightarrow$   $\underline{\quad} \times \underline{\quad} + \underline{\quad} = 18$
- 3 and 18  $\rightarrow$   $\underline{\quad} \div \underline{\quad} = 6$
- 3, 8, and 25  $\rightarrow$   $\underline{\quad} - \underline{\quad} + \underline{\quad} = 30$
- 8, 9, and 3  $\rightarrow$   $\underline{\quad} \times \underline{\quad} + \underline{\quad} = 75$
- 3, 4, and 5  $\rightarrow$   $\underline{\quad} \times \underline{\quad} - \underline{\quad} = 11$
- 4, 12, and 20  $\rightarrow$   $\underline{\quad} \div \underline{\quad} + \underline{\quad} \div \underline{\quad} = 8$
- 3, 9, and 48  $\rightarrow$   $\underline{\quad} \times \underline{\quad} + \underline{\quad} \div \underline{\quad} = 43$

**Solution:**

- $2 \times 5 + 8 = 18$
- $18 \div 3 = 6$
- $25 - 3 + 8 = 30$
- $8 \times 9 + 3 = 75$
- $3 \times 5 - 4 = 11$
- $12 \div 4 + 20 \div 4 = 8$
- $3 \times 9 + 48 \div 3 = 43$

3. If Ethan wins a game, seven tickets are given to him. If he loses, he must return four tickets. How many tickets does he receive, if he wins 5 games and loses 3?

**Solution:**

$$(5 \times 7) - (3 \times 4) = 35 - 12 = 23$$

**Answer: 23 tickets**

4. Lyn buys 3 bouquets of flowers for \$13 each. He pays with four \$10 bills. How much money does he have left?

**Solution:**

$$(4 \times 10) - (3 \times 13) = 40 - 39 = \$1$$

5. Pola buys 3 hamster pets for \$5 each. She also buys 9 kilograms of pet food. One kilogram costs \$2. Ceasar buys 4 hamster pets for \$4 each. He buys 7 kilograms of the same pet food. Who spent more money and by how much?

**Solution:**

$$\text{Pola: } 3 \times 5 + 9 \times 2 = 33$$

$$\text{Ceasar: } 4 \times 4 + 7 \times 2 = 30$$

**Pola spent more money by \$3.**

6. What is the value of expression  $63 \div 7 - 12 + 5 \times 8 \div 4$ ?

- 27
- 45
- 7
- None of the above

**Solution:**

**C. 7**