4th Grade Operations & Algebraic Thinking - Standard 4 - Practice Test 1

Multiple Choice
Identify the choice that best completes the statement or answers the question.

1. Factor: 100
   a. 2 * 5 * 5
   b. 2 * 2 * 5 * 5
   c. 2 * 3 * 6 * 5
   d. 2 * 5 * 2 *

2. Factor: 84
   a. 2 * 2 * 3 * 7
   b. 2 * 4 * 3 * 7
   c. 2 * 42
   d. Can't. It's prime.

3. Factor: 57
   a. 3 * 19
   b. 3 * 3 * 7
   c. 2 * 7 * 7
   d. Can't. It's prime.

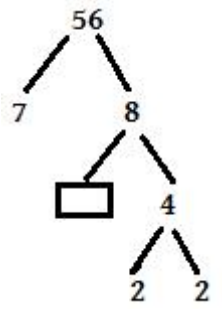
4. Factor: 42
   a. 2 * 21
   b. 2 * 3 * 7
   c. 3 * 14
   d. Can't. It's prime.

5. Factor:
   a. 1 * 12
   b. 3 * 4
   c. 2 * 2 * 3
   d. Can't. It's prime.

6. Factor: 17
   a. 1 * 17 * 1
   b. 8 + 9
   c. 2 * 3 * 3
   d. Can't. It's prime.

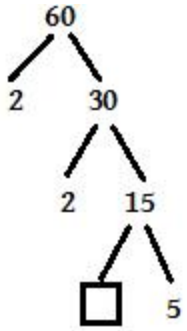
7. 

   What is the missing factor?
   a. 7
   b. 11
   c. 10
   d. 9

8. 

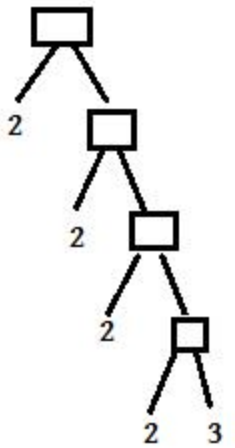
What is the missing factor?

a. 2
b. 4
c. 8
d. 10

9. 

What is the missing factor?

a. 1
b. 15
c. 3
d. 2

10. 

Use the final factors (at the bottom) to figure out what the original number is for this factor tree.

a. 98
b. 48
c. 18
d. 36

Answer 1: B

100 has a factor of 2 = 2 * 50

50 has a factor of 2 = 2 · 2 · 25

25 has a factor of 5 = 5 * 5

Answer 2: A

84 has a factor of 2 = 2 * 42

42 has a factor of 2 = 2 * 2 * 21

21 has a factor of 3 = 3 * 7

Answer 3: A

57 has a prime number factor of 3 = 3 * 19

19 has no factors (except 1 and itself) so you have completed the factoring for 57 with just 2 numbers.

Answer 4: B

42 has a factor of 2 = 2 * 21

21 has a factor of 3 = 3 * 7

Answer 5: C

12 has a factor of 2 = 2 * 6

6 has a factor of 2 = 2 * 3

Answer 6: D

17 is only divisible by 1 and itself, which makes it a prime number. Prime numbers aren't factored.

Answer 7: B

77 mc007-2.jpg 7 = 11

Answer 8: A

The missing factor is under the 8. So, 8 mc008-3.jpg 4 = 2

Answer 9: C

Answer 10: B

If you start at the bottom, 2 x 3 = 6. Then 2 x 6 = 12. Then, 2 x 12 = 24, and finally, 2 x 24 = 48