Number Towers

A. Choose the correct answer:

1. If the base of a number tower is 2, and each level adds 2, what will the third level be?

a) 4   b) 6

c) 8   d) 2

2. In a number tower, if the bottom row is 3, 6, 9, what is the next number?

a) 10   b) 11

c) 12   d) 15

3. A number tower is built by adding the two numbers below. If the bottom row is 2, 3, what is the number above them?

a) 6   b) 4

c) 5   d) 3

4. In a number tower, if the first row is 4, 8, and the next row is 12, what is the pattern used?

a) Subtraction   b) Multiplication

c) Addition   d) Division

5. What is the top number in this tower: bottom row: 1, 2, second row: 3, top: ___?

a) 6   b) 5

c) 3   d) 4

B. Write the Missing Terms to Complete the Sentences:

1. In a number tower, if the two bottom numbers are 5 and 7, the number above is _____

2. 3 + 4 = _____ (used in a number tower step)

3. If the second level is 9 and one lower number is 5, the other is _____

4. In a triangle pattern, the top number comes from _____ the two below

5. If the bottom row is 2, 4, 6, the next row can be 6, _____

C. Mark each sentence with a True (✔) or False (✗):

1. In a number tower, the number above is usually the sum of two numbers below   _____

2. All number towers use subtraction   _____

3. A tower with base 2, 4, 6 will form an addition pattern   _____

4. A number tower always gets smaller at the top   _____

5. Number towers help in learning patterns   _____

D. Figure out the answers to these questions:

1. Draw a number tower with base 1, 2, 3 and fill in the next two levels

2. If the tower has 2, 5 at the bottom, what is the value of the top?

3. Build a tower with bottom numbers 3, 6, 9, and show the sum-based values above

4. Complete this number tower: bottom row: 4, 7, second row: _____

5. A number tower starts with 5 and adds 3 at every level. What are the next three levels?

E. Challenge yourself with these questions:

1. Create your own number tower using 3 1/2, 4 1/2, and 5

2. What happens to a number tower if you subtract numbers at each level instead of adding?

3. Complete the pattern: bottom: 1, 3, 5; next: ___, ___; top: ___

4. Make a number tower using multiplication pattern from base 2, 4

5. Fill in a number tower that starts with 10 and reduces by 2 each level.