6.4

1. Use your knowledge of perfect squares to complete the table below.

Square Root	1	3		11		20
Perfect Square	1	9	49		196	

2. Identify all of the answer choices that are equivalent to 6^4.

| $6\times6\times6\times6$ | 4^6 | 6×4 | $1,296$ | 24×4 |

| 24 | 36×36 | $6\times6\times6\times6\times6$ | 216×6 | $7,776$ |

3. What is the value of 10^6 ?

$$10^1 = 10$$
$$10^2 = 100$$
$$10^3 = 1,000$$
$$10^4 = 10,000$$

A. 1,000
B. 100,000
C. 1,000,000
D. 10,000,000

4. Which best describes the numbers in the pattern below?

100, 121, 144, 169, …

A. square roots
B. perfect squares
C. scientific notation
D. exponential notation

5. Max placed the numeral 10,000 in the place value chart.

Ten Thousands	Thousands	Hundreds	Tens	Ones
1	0	0	0	0

What is 10,000 written in powers of 10?

A. 10^2

B. 10^3

C. 10^4

D. 10^5

6. Based on the pattern show below, what is the value of 4^5?

$$4^1 = 4$$
$$4^2 = 16$$
$$4^3 = 64$$

A. 20

B. 68

C. 256

D. 1,024

7. A pattern of increasing perfect squares is shown.

9, 16, 25, 36, 49, 64, …

What number comes next in this pattern?

A. 100

B. 81

C. 79

D. 65

8. How should 10^6 be written in a place value chart?

A.

Thousands	Hundreds	Tens	Ones
1	0	0	0

B.

Ten-thousands	Thousands	Hundreds	Tens	Ones
1	0	0	0	0

C.

Hundred-thousands	Ten-thousands	Thousands	Hundreds	Tens	Ones
1	0	0	0	0	0

D.

Millions	Hundred-thousands	Ten-thousands	Thousands	Hundreds	Tens	Ones
1	0	0	0	0	0	0