Aksum Math

Name: _____

Scientific Notation

Date: _____

Numbers & Patterns · Grade 8

Score: _____ / 10

Easy · 10 Questions

Solve each problem. Show your work in the space provided. Write your answer on the line.

1. Write 3,400,000 in scientific notation.

Answer: _____

2. Write 0.00072 in scientific notation.

Answer: _____

3. Write 5.6×10^{3} in standard form.

Answer: _____

4. Write 2.3×10^{-5} in standard form.

Answer: _____

5. Write 890,000,000 in scientific notation.

Answer: _____

6. Which is larger: 3.2×10^5 or 9.1×10^4?

Answer: _____

7. Write 0.0000506 in scientific notation.

Answer: _____

8. Write 1.08×10^7 in standard form.

Answer: _____

9. Is 42×10^3 written in correct scientific notation? If not, correct it.

Answer: _____

10. Write the speed of light (300,000,000 m/s) in scientific notation.

Answer: _____

Answer Key Scientific Notation — Easy

1. **3.4×10^{6}**

Move decimal 6 places left: 3,400,000 → 3.4. Power = 6.

2. **7.2×10^{-4}**

Move decimal 4 places right: 0.00072 → 7.2. Negative power = −4.

3. **5,600**

Move decimal 3 places right: 5.6 → 5,600.

4. **0.000023**

Move decimal 5 places left: 2.3 → 0.000023.

5. **8.9×10^{8}**

Move decimal 8 places left. Power = 8.

6. **3.2×10^{5} (= 320,000 > 91,000)**

$10^{5} > 10^{4}$, so $3.2 \times 10^{5} = 320{,}000 > 91{,}000$.

7. **5.06×10^{-5}**

Move decimal 5 places right: 5.06. Power = −5.

8. **10,800,000**

Move decimal 7 places right: 10,800,000.

9. **No. Correct form: 4.2×10^{4}**

Scientific notation requires $1 \leq |\text{coefficient}| < 10$. Move decimal: 4.2×10^{4}.

10. **3.0×10^{8} m/s**

Move decimal 8 places left. Coefficient = 3.0.