

## 8.EE.A.4 ADDITIONAL PRACTICE

## Answer Key

- 1) Determine both the sum and product of the numbers below. Express your answers in scientific notation in the appropriate box.

$(2.8 \cdot 10^3)$ and $(2.5 \cdot 10^3)$	Sum: $5.3 \cdot 10^3$
	Product: $7 \cdot 10^6$

- 3) Find the product of 5,400 and  $(6 \cdot 10^5)$ . Write your answer in scientific notation.

$3.24 \cdot 10^9$

- 2) What is 6 million subtracted from  $(9.3 \cdot 10^6)$ , expressed in scientific notation?

$3.3 \cdot 10^6$

- 4) Determine the quotient below, expressed in scientific notation.

$$\frac{(3.5 \cdot 10^5)}{(7 \cdot 10^7)}$$

$5 \cdot 10^{-3}$

For questions 5-8, use this table that compares the approximate populations of three countries in 1980 versus 2020.

Country	Pop. in 1980	Pop. in 2020
United States	$2.27 \cdot 10^8$	$3.3 \cdot 10^8$
Canada	$2.45 \cdot 10^7$	$3.7 \cdot 10^7$
Mexico	$7 \cdot 10^7$	$1.4 \cdot 10^8$

- 5) How many total people lived in the United States and Mexico in 2020? Express your answer in scientific notation.

$4.7 \cdot 10^8$

- 6) How many more people lived in the United States in 2020 compared to 1980? Express your answer in standard form.

103,000,000 more people

- 7) How many times greater is Mexico's population in 2020 than it was in 1980? Express your answer in standard form.

2 times greater

- 8) If each person in Canada in 2020 won \$5,000,000 from the lottery, how much would the country's total winnings be? Express your answer in scientific notation.

$1.85 \cdot 10^{14}$  dollars

- 9) A cross country coach instructs his team to run for a duration of  $5.4 \cdot 10^6$  milliseconds for practice one day. Choose a more appropriate unit to represent this duration and convert it to that unit.

Answers may vary: 90 minutes or 1.5 hours

- 10) When a student multiplied 50 million by 300 in her scientific calculator, she got the below result. Express this number in both scientific notation and standard form.

1.5E10

$1.5 \cdot 10^{10}$ ; 15,000,000,000