

ALGEBRA

Content Standard 7

1. The distance from Birmingham, Alabama, to Salt Lake City, Utah, is 1781 miles. This distance is 812 miles more than the distance from Birmingham, Alabama, to New York City.

Which number sentence below could be used to determine the distance, in miles, from Birmingham to New York City?

- A** $\square + 1781 = 812$
B $1781 \times 812 = \square$
C $1781 = 812 \div \square$
D $\square = 1781 - 812$

2. A local school district purchased computers and software for its schools. The total cost for the computers was \$1,431,505. The software costs \$68,495.

Which number sentence below could be used to determine the total cost of the computers and the software the school district bought?

- A** $\$1,431,505 - \$68,495 = \square$
B $\$1,431,505 \div \$68,495 = \square$
C $\$1,431,505 + \$68,495 = \square$
D $\$1,431,595 \times \$68,495 = \square$

3. The local amusement park had 1,306,250 people visit in 2003. In 2002, the amusement park had 78,500 fewer people visit.

Which number sentence below could be used to determine the number of people who visited the amusement park in 2002?

- A** $1,306,250 \div \square = 78,500$
B $78,500 = 1,306,250 \times \square$
C $1,306,250 - 78,500 = \square$
D $\square = 1,306,250 + 78,500$

4. Betty has 2,916 greeting cards to put into boxes. Each box will hold 18 cards.

Which number sentence below could be used to determine the number of boxes Betty will use for the greeting cards?

- A** $2,916 \div 18 = \square$
B $\square = 2,916 \times 18$
C $2,916 - \square = 18$
D $\square + 18 = 2,916$

5. Georgia became a state in 1788.
Alabama became a state 31 years later.

Which number sentence below could be used to determine the year Alabama became a state?

- A** $1788 - \square = 31$
B $\square + 1788 = 31$
C $31 + \square = 1788$
D $\square - 31 = 1788$

6. The school district built a new school with 45 classrooms. Regulations required that no classroom could hold more than 35 students.

Which number sentence below could be used to show the *greatest* number of students that could attend this new school?

- A** $45 \div 35 = \square$
B $\square = 35 \times 45$
C $45 - 35 = \square$
D $\square = 45 + 35$

7. There are 1432 students in Victoria Middle School. There are 145 fewer students at Miller Middle School.

Which number sentence below could be used to determine the number of students in Miller Middle School?

- A** $\square = 1432 - 145$
B $\square = 1432 + 145$
C $\square = 1432 \times 145$
D $\square = 1432 \div 145$

8. There are 40 apartments in a building. Each apartment has the same amount of floor space. All together, there are 32,000 square feet of floor space in the building.

Which number sentence below could be used to determine the amount of floor space, in square feet, in *each* of the 40 apartments?

A $\square \div 32,000 = 40$

B $32,000 \div 40 = \square$

C $32,000 - \square = 40$

D $32,000 \times 40 = \square$

9. The population of Phoenix is 1,321,045, the population of San Antonio is 1,144,646, and the population of Huntsville is 158,216.

Which number sentence below could be used to determine the difference between the population of Phoenix and the combined populations of Huntsville and San Antonio?

- A** $1,321,045 + (1,144,646 - 158,216) = \square$
- B** $1,321,045 - (1,144,646 + 158,216) = \square$
- C** $1,321,045 + (1,144,646 + 158,216) = \square$
- D** $1,321,045 - (1,144,646 - 158,216) = \square$