

CAHSEE Mathematics - Chapter 3

NUMBER SENSE (NS)

14 problems on the CAHSEE

Number sense is a review of grade seven mathematics. The main focus is on integers, fractions, decimals and percents.

Number sense is the basis of mathematics.

Just remember all numbers are FRACTIONS.

Integers have denominators of 1, percents have denominators of 100 and decimals have denominators of powers of 10.

To solve word problems, read carefully and follow the directions in the problem.

Content to be tested

3 items

7 NS 1.2

2 items

7 NS 1.3

7 NS 1.7

* NS standards 2.1, 2.2, 2.3, 2.5 and 2.5 are all under the heading of 2.0. That means there are 5 problems that are related in content.

Important Vocabulary

NS 1.1

diameter

NS1.7

interest
simple interest

NS2.4

square root

NS1.3, NS1.6

discount
percent
increase
commission

NS2.2

factor
lowest common denominator

NS2.5

value
absolute value

Practice Problems - Number Sense

1. $\frac{29}{30} - \left(\frac{1}{6} + \frac{3}{10}\right)$

- A. $\frac{1}{2}$
 B. $\frac{5}{6}$
 C. $\frac{9}{10}$
 D. $\frac{25}{14}$

NS1.2 (3 items)

5. Frank got 16 questions right on a 20 item test. What **percent** of the questions did Frank get right?

- A. 16%
 B. 20%
 C. 75%
 D. 80%

NS1.3 (2 items)

2. James uses $\frac{5}{8}$ of a cup of cornflakes per serving of breakfast. How many cups of cornflakes should he use to make breakfast for 4 servings?

- A. $\frac{2}{5}$
 B. 5
 C. $2\frac{1}{2}$
 D. 10

NS1.2 (3 items)

6. Mary invested \$300 at 6% **simple interest** for 4 years. How much **interest** did Mary earn?

- A. \$18
 B. \$24
 C. \$72
 D. \$96

NS1.7 (2 items)

3. $\left(\frac{3}{4}\right)^3 =$

- A. $\frac{9}{4}$
 B. $\frac{1}{4}$
 C. $\frac{27}{64}$
 D. $\frac{27}{4}$

NS1.2 (3 items)

7. If $|\chi - 3| = 7$. What is the value of χ ?

- A. 3, -3
 B. 4, -10
 C. 10, -10
 D. 10, -4

NS2.5 (1 item)

4. Seven members of band are buying new outfits. Jackets cost \$39 each, a pair of shoes cost \$49, a shirt cost \$14 and a pair of jeans cost \$28. What is the total cost for all the outfits?

- A. \$130
 B. \$137
 C. \$910
 D. \$1000

NS1.2 (3 items)

8. What is the absolute value of $-\frac{2}{3}$?

- A. $\frac{3}{2}$
 B. $-\frac{3}{2}$
 C. $\frac{2}{3}$
 D. $-\frac{2}{3}$

NS2.5 (1 item)