

MULTIPLE CHOICE

1. 5NS1.1 a. 1. Round 21.287 to the nearest hundredth:

- a. 21.29
- b. b

ANS: A

We look at the digit one right of the “hundredth” - that is, the **third** decimal.

21.287 Since 7 \Rightarrow 5 we put 9 and drop the rest.

PTS: 1 DIF: Grade 5

REF: 5NS.1.0 Students compute with very large and very small numbers, positive integers, decimals, and fractions and understand the relationship between decimals, fractions, and percents. They understand the relative magnitudes of numbers.

OBJ: 5NS.1.1 Estimate, round, and manipulate very large (e.g., millions) and very small (e.g., thousandths) numbers. TOP: Number Sense

MSC: LFS & DB-343

2. 5NS1.1 a. 2. Round 91.866 to the nearest tenth:

- a. 91.9
- b. b

ANS: A

We look at the digit one right of the “tenth” - that is, the **second** decimal.

91.866 Since 6 \Rightarrow 5 we put 9 and drop the rest.

PTS: 1 DIF: Grade 5

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OBJ: 5NS.1.1 Estimate, round, and manipulate very large (e.g., millions) and very small (e.g., thousandths) numbers. TOP: Number Sense

MSC: LFS & DB-343

3. 5NS1.1 b. 1. Round off 1,711,238 to the nearest million:

- a. 2,000,000
- b. b

ANS: A

We look at the digit one right of the “million” - that is, the **hundred thousand**.

17711238 Since $7 \Rightarrow 5$ we put 2 and in the million place and keep 0s as place holders

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MSC: LFS & DB-343

4. 5NS1.1 b. 2. Round off 7,236,820 to nearest hundred thousand:

- a. 7,200,000
- b. b

ANS: A

We look at the digit one right of the “hundred thousand” - that is, the **ten thousand**.

7236820 Since $3 < 5$ we leave 2 and keep 0s as place holders

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MSC: LFS & DB-343

5. 5NS1.2 a.1.i Write this value as a decimal: $\frac{44}{1000}$

a. 0.044

b. b

ANS: A

$$\frac{44}{1000} = 44 \div 1000 = 0.044$$

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OBJ: 5NS.1.2 Interpret percents as a part of a hundred; find decimal and percent equivalents for common fractions and explain why they represent the same value; compute a given percent of a whole number. TOP: Number Sense

MSC: LFS & DB-343

6. 5NS1.2 a.1.ii Write this value as a decimal: $\frac{4}{100}$

a. 0.04

b. b

ANS: A

$$\frac{4}{100} = 4 \div 100 = 0.04$$

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MSC: LFS & DB-343

7. 5NS1.2 a.1.iii Write this value as a decimal: 58 %

a. 0.58

b. b

ANS: A

$$58\% = \frac{58}{100} = 0.58$$

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MSC: LFS & DB-343

8. 5NS1.2 a.2. i Write this value as a fraction: 0.41:

a. $\frac{41}{100}$

b. b

ANS: A

$$0.41 = \frac{41}{100}$$

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MSC: LFS & DB-343

NOT: Za site vrednosti

9. 5NS1.2 a.2. i Write this value as a fraction: 0.48:

a. $\frac{12}{25}$

b. b

ANS: A

$$0.48 = \frac{48}{100} = \frac{12}{25}$$

PTS: 1

DIF: Grade 5

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TOP: Number Sense

MSC: LFS & DB-343

NOT: d2<>1

10. 5NS1.2 a.2. ii Write this value as a fraction: 40.3:

a. $40\frac{3}{10}$

b. b

ANS: A

$$40.3 = \frac{403}{10} = 40\frac{3}{10}$$

PTS: 1

DIF: Grade 5

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TOP: Number Sense

MSC: LFS & DB-343

11. 5NS1.2 a.2. iii Write this value as a fraction 94 %:

a. $\frac{47}{50}$

b. b

ANS: A

$$94\% = 0.94 = \frac{94}{100} = \frac{47}{50}$$

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MSC: LFS & DB-343

12. 5NS1.2 a.2. iv Write a fraction with a denominator of 3 equivalent to this value: 12

a. $\frac{36}{3}$

b. b

ANS: A

$$36 \div 3 = 12$$

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MSC: LFS & DB-343

13. 5NS1.2 a.3. i Write this value as a percent 0.39 .

- a. 39 %
- b. b

ANS: A
 $0.39 = 39\%$

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MSC: LFS & DB-343

14. 5NS1.2 a.3. ii Write this value as a percent 0.593 .

- a. 59.3 %
- b. b

ANS: A
 $0.593 = 59.3\%$

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MSC: LFS & DB-343

15. 5NS1.2 a.3. iii Write this value as a percent $\frac{29}{40}$.

a. 72.5 %

b. b

ANS: A

$$\frac{29}{40} = 29 \div 40 = 0.725 = 72.5\%$$

PTS: 1

DIF: Grade 5

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MSC: LFS & DB-343

16. 5NS1.2 a.3. iv Write this value as a percent $\frac{7}{5}$.

a. 140 %

b. b

ANS: A

$$\frac{7}{5} = 7 \div 5 = 1.4 = 140\%$$

PTS: 1

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MSC: LFS & DB-343

17. 5NS1.2 b.1. What is 90 % of 20?

- a. 18
- b. b

ANS: A

$$20 \cdot 90\% = 20 \cdot \frac{90}{100} = 18$$

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MSC: LFS & DB-343

18. 5NS1.2 b.2. What is 32 % of 25?

- a. 8
- b. b

ANS: A

$$25 \cdot 32\% = 25 \cdot \frac{32}{100} = 8$$

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MSC: LFS & DB-343

19. 5NS1.2 b.3. What is 180% of 30?

- a. 54
- b. b

ANS: A

$$30 \cdot 180\% = 30 \cdot \frac{180}{100} = 54$$

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MSC: LFS & DB-343

20. 5NS1.3 Write as a whole number: 4^3 ?

- a. 64
- b. b

ANS: A

$$4 \cdot 4 \cdot 4 = 64$$

PTS: 1 DIF: Grade 5

REF: 5NS.1.0 Students compute with very large and very small numbers, positive integers, decimals, and fractions and understand the relationship between decimals, fractions, and percents. They understand the relative magnitudes of numbers.

OBJ: 5NS.1.3 Understand and compute positive integer powers of nonnegative integers; compute examples as repeated multiplication. TOP: Number Sense

MSC: LFS & DB-343

21. 5NS1.4 a. Write this number as the product of its prime factors, using exponents to show multiples of a factor if needed: 96

a. $2^5 \cdot 3$

b. b

ANS: A

$$2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 3 = 96$$

PTS: 1

DIF: Grade 5

REF: 5NS.1.0 Students compute with very large and very small numbers, positive integers, decimals, and fractions and understand the relationship between decimals, fractions, and percents. They understand the relative magnitudes of numbers.

OBJ: 5NS.1.4 Determine the prime factors of all numbers through 50 and write the numbers as the product of their prime factors by using exponents to show multiples of a factor. TOP: Number Sense MSC: LFS & DB-343

22. 5NS1.4 b. Write this number as the product of its prime factors, using exponents to show multiples of a factor if needed: 80

a. $2^4 \cdot 5$

b. b

ANS: A

$$2 \cdot 2 \cdot 2 \cdot 2 \cdot 5 = 80$$

PTS: 1

DIF: Grade 5

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OBJ: 5NS.1.4 Determine the prime factors of all numbers through 50 and write the numbers as the product of their prime factors by using exponents to show multiples of a factor. TOP: Number Sense MSC: LFS & DB-343

27. 5NS2.1 a.2. Evaluate: $15 \div 0.1$:

- a. 150
- b. b

ANS: A

$$15 \div 0.1 = 15 \div \frac{1}{10} = 15 \times \frac{10}{1} = 150$$

PTS: 1 DIF: Grade 5

REF: 5NS.2.0 Students perform calculations and solve problems involving addition, subtraction, and simple multiplication and division of fractions and decimals.

OBJ: 5NS.2.1 Add, subtract, multiply, and divide with decimals; add with negative integers; subtract positive integers from negative integers; and verify the reasonableness of the results. TOP: Number Sense MSC: LFS & DB-343

28. 5NS2.1 a.3. Evaluate: $45 - 0.985$:

- a. 44.015
- b. b

ANS: A

$$45 - 0.985 = 44.015$$

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29. 5NS2.1 a.4. Evaluate: $11 + 0.175 + 38.8$:

- a. 49.975
- b. b

ANS: A

$$11 + 0.175 + 38.8 = 49.975$$

PTS: 1 DIF: Grade 5

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30. 5NS2.1 b.1. Evaluate: $-7 - 7$:

- a. -14
- b. b

ANS: A
 $-7 - 7 = -14$

PTS: 1 DIF: Grade 5

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31. 5NS2.1 b.2. Evaluate: $-10 + 7$:

- a. -3
- b. b

ANS: A
 $-10 + 7 = -3$

PTS: 1 DIF: Grade 5

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OBJ: 5NS.2.1 Add, subtract, multiply, and divide with decimals; add with negative integers; subtract positive integers from negative integers; and verify the reasonableness of the results. TOP: Number Sense MSC: LFS & DB-343

32. 5NS2.1 b.3. Evaluate: $-5 + 1$:

- a. -4
- b. b

ANS: A
 $-5 + 1 = -4$

PTS: 1 DIF: Grade 5

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OBJ: 5NS.2.1 Add, subtract, multiply, and divide with decimals; add with negative integers; subtract positive integers from negative integers; and verify the reasonableness of the results. TOP: Number Sense MSC: LFS & DB-343

33. 5NS2.1 b.4. Evaluate: $-4 + (-6)$:

- a. -10
- b. b

ANS: A
 $-4 + (-6) = -10$

PTS: 1 DIF: Grade 5

REF: 5NS.2.0 Students perform calculations and solve problems involving addition, subtraction, and simple multiplication and division of fractions and decimals.

OBJ: 5NS.2.1 Add, subtract, multiply, and divide with decimals; add with negative integers; subtract positive integers from negative integers; and verify the reasonableness of the results. TOP: Number Sense MSC: LFS & DB-343

34. 5NS2.1 b.5. Evaluate: $13 + (-5)$:

- a. 8
- b. b

ANS: A
 $13 + (-5) = 8$

PTS: 1 DIF: Grade 5

REF: 5NS.2.0 Students perform calculations and solve problems involving addition, subtraction, and simple multiplication and division of fractions and decimals.

OBJ: 5NS.2.1 Add, subtract, multiply, and divide with decimals; add with negative integers; subtract positive integers from negative integers; and verify the reasonableness of the results. TOP: Number Sense MSC: LFS & DB-343

35. 5NS2.1 b.6. Evaluate: $-7 - (-5)$:

- a. -2
- b. b

ANS: A
 $-7 - (-5) = -7 + 5 = -2$

PTS: 1 DIF: Grade 5

REF: 5NS.2.0 Students perform calculations and solve problems involving addition, subtraction, and simple multiplication and division of fractions and decimals.

OBJ: 5NS.2.1 Add, subtract, multiply, and divide with decimals; add with negative integers; subtract positive integers from negative integers; and verify the reasonableness of the results. TOP: Number Sense MSC: LFS & DB-343

36. 5NS2.2 a. Evaluate: $144 \div 24$:

- a. 6
- b. b

ANS: A
 $144 \div 24 = 6$

PTS: 1 DIF: Grade 5

REF: 5NS.2.0 Students perform calculations and solve problems involving addition, subtraction, and simple multiplication and division of fractions and decimals.

OBJ: 5NS.2.2 Demonstrate proficiency with division, including division with positive decimals and long division with multidigit divisors. TOP: Number Sense

MSC: LFS & DB-343

37. 5NS2.2 b. Evaluate: $442 \div 1.3$

- a. 340
- b. b

ANS: A
 $442 \div 1.3 = 340$

PTS: 1 DIF: Grade 5

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OBJ: 5NS.2.2 Demonstrate proficiency with division, including division with positive decimals and long division with multidigit divisors. TOP: Number Sense

MSC: LFS & DB-343

38. 5NS2.2 c. Evaluate: $735 \div 30$

- a. 24.5
- b. b

ANS: A
 $735 \div 30 = 24.5$

PTS: 1 DIF: Grade 5

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OBJ: 5NS.2.2 Demonstrate proficiency with division, including division with positive decimals and long division with multidigit divisors. TOP: Number Sense

MSC: LFS & DB-343

39. 5NS2.3 a. Evaluate: $\frac{17}{12} + \frac{1}{4}$. Write as a reduced, mixed fraction.

a. $1\frac{2}{3}$

b. b

ANS: A

$$\frac{17}{12} + \frac{1}{4} = \frac{5}{3} = 1\frac{2}{3}$$

PTS: 1

DIF: Grade 5

REF: 5NS.2.0 Students perform calculations and solve problems involving addition, subtraction, and simple multiplication and division of fractions and decimals.

OBJ: 5NS.2.3 Solve simple problems, including ones arising in concrete situations, involving the addition and subtraction of fractions and mixed numbers (like and unlike denominators of 20 or less), and express answers in the simplest form.

TOP: Number Sense

MSC: LFS & DB-343

40. 5NS2.3 a. Evaluate: $8 - \frac{5}{4}$. Write as a reduced, mixed fraction.

a. $6\frac{3}{4}$

b. b

ANS: A

$$8 - \frac{5}{4} = \frac{27}{4} = 6\frac{3}{4}$$

PTS: 1

DIF: Grade 5

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TOP: Number Sense

MSC: LFS & DB-343

41. 5NS2.3 a. Evaluate: $1\frac{4}{9} + 2\frac{2}{3}$. Write as a reduced, mixed fraction.

a. $4\frac{1}{9}$

b. b

ANS: A

$$1\frac{4}{9} + 2\frac{2}{3} = 4\frac{1}{9}$$

PTS: 1

DIF: Grade 5

REF: 5NS.2.0 Students perform calculations and solve problems involving addition, subtraction, and simple multiplication and division of fractions and decimals.

OBJ: 5NS.2.3 Solve simple problems, including ones arising in concrete situations, involving the addition and subtraction of fractions and mixed numbers (like and unlike denominators of 20 or less), and express answers in the simplest form.

TOP: Number Sense

MSC: LFS & DB-343

42. 5NS2.3 a. Evaluate: $2\frac{2}{3} - 1\frac{5}{12}$. Write as a reduced, mixed fraction.

a. $1\frac{1}{4}$

b. b

ANS: A

$$2\frac{2}{3} - 1\frac{5}{12} = 1\frac{1}{4}$$

PTS: 1

DIF: Grade 5

REF: 5NS.2.0 Students perform calculations and solve problems involving addition, subtraction, and simple multiplication and division of fractions and decimals.

OBJ: 5NS.2.3 Solve simple problems, including ones arising in concrete situations, involving the addition and subtraction of fractions and mixed numbers (like and unlike denominators of 20 or less), and express answers in the simplest form.

TOP: Number Sense

MSC: LFS & DB-343