

MULTIPLE CHOICE

1. 5NS1.1 a. 1. Round 28.143 to the nearest hundredth:
- a. 28.14
 - b. 28.15
 - c. 28.143
 - d. 28.1

ANS: A

We look at the digit one right of the “hundredth” - that is, the **third** decimal.
28.143 Since $3 < 5$ we leave 4 and drop the rest.

	Feedback
A	Correct!
B	Incorrect.
C	This is not rounded at all.
D	This is rounded to the nearest tenth.

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

4. 5NS1.1 b. 2. Round off 5,419,230 to nearest hundred thousand:

- a. 5,400,000
- b. 5,419,230
- c. 5,000,000
- d. 5,500,000

ANS: A

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

5419230 Since $1 < 5$ we leave 4 and keep 0s as place holders

	Feedback
A	Correct!
B	This is just the given number (not rounded).
C	This is rounded to the nearest millions.
D	Incorrect.

PTS: 1 DIF: Grade 5

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TOP: Number Sense

MSC: LFS & DB-343

5. 5NS1.2 a.1.i Write this value as a decimal: $\frac{24}{100}$

a. 0.24

c. 2.4

b. 24

d. 0.25

ANS: A

$$\frac{24}{100} = 24 \div 100 = 0.24$$

	Feedback
A	Correct!
B	You need to place the decimal point.
C	You are off by a factor of 10.
D	Incorrect.

PTS: 1

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MSC: LFS & DB-343

6. 5NS1.2 a.1.ii Write this value as a decimal: $\frac{9}{200}$

a. 0.045

c. 0.45

b. 0.09

d. 0.035

ANS: A

$$\frac{9}{200} = 9 \div 200 = 0.045$$

	Feedback
A	Correct!
B	Decimals have powers of 10 as their denominators.
C	You are off by a factor of 10.
D	Incorrect!

PTS: 1

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TOP: Number Sense

MSC: LFS & DB-343

7. 5NS1.2 a.1.iii Write this value as a decimal: 88 %

a. 0.88

c. 8.8

b. 88

d. 0.89

ANS: A

$$88\% = \frac{88}{100} = 0.88$$

	Feedback
A	Correct!
B	You need to divide by 100 to get rid of the % sign.
C	You are off by a factor of 10.
D	Incorrect.

PTS: 1

DIF: Grade 5

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TOP: Number Sense

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8. 5NS1.2 a.2. i Write this value as a fraction: 0.6

a. $\frac{3}{5}$

c. $\frac{61}{100}$

b. 6

d. $\frac{6}{5}$

ANS: A

$$0.6 = \frac{6}{10} = \frac{3}{5}$$

	Feedback
A	Correct!
B	You are off by a factor of 10.
C	Incorrect.
D	Incorrect.

PTS: 1

DIF: Grade 5

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TOP: Number Sense

MSC: LFS & DB-343

NOT: Za site vrednosti

9. 5NS1.2 a.2. i Write this value as a fraction: 2.5

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

c. $\frac{251}{100}$

b. $\frac{25}{2}$

d. $\frac{5}{2}$

ANS: D

$$2.5 = \frac{25}{10} = \frac{5}{2}$$

	Feedback
A	You are off by a factor of 10.
B	Incorrect.
C	Incorrect.
D	Correct!

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: 9.86

a. $9\frac{43}{50}$

c. $\frac{987}{100}$

b. $\frac{493}{5}$

d. $\frac{493}{25}$

ANS: A

$$9.86 = \frac{986}{100} = 9\frac{86}{100} = 9\frac{43}{50}$$

	Feedback
A	Correct!
B	You are off by a factor of 10.
C	Incorrect.
D	Incorrect.

PTS: 1

DIF: Grade 5

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11. 5NS1.2 a.2. iii Write this value as a fraction: 54 %

a. $\frac{27}{50}$

c. 54

b. $\frac{27}{500}$

d. $\frac{27}{25}$

ANS: A

$$54\% = 0.54 = \frac{54}{100} = \frac{27}{50}$$

	Feedback
A	Correct!
B	You are off by a factor of 10.
C	You forgot to divide by 100 to rid of the %.
D	Incorrect.

PTS: 1

DIF: Grade 5

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12. 5NS1.2 a.2. iv Write a fraction with a denominator of 5 equivalent to this value: 95

a. $\frac{475}{5}$

c. $\frac{19}{5}$

b. $\frac{95}{5}$

d. 475

ANS: A

$$95 = \frac{95 \times 5}{5} = \frac{475}{5}$$

	Feedback
A	Correct!
B	You need to multiply 95 by 5.
C	You need to multiply 95 by 5 - not divide.
D	This is just the numerator - you need a fraction.

PTS: 1

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TOP: Number Sense

MSC: LFS & DB-343

13. 5NS1.2 a.3. i Write this value as a percent: 0.16

- a. 16 %
- b. 160 %

- c. 1.6 %
- d. 0.16 %

ANS: A

$$0.16 = \frac{16}{100} = 16\%$$

	Feedback
A	Correct!
B	You need to multiply by 100 not 1000.
C	You need to multiply by 100 not 10.
D	You need to multiply by 100 to be able to write %.

PTS: 1

DIF: Grade 5

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14. 5NS1.2 a.3. ii Write this value as a percent: 0.597

a. 59.7 %

c. 5.97 %

b. 597 %

d. 0.597 %

ANS: A

$$0.597 = \frac{59.7}{100} = 59.7\%$$

	Feedback
A	Correct!
B	You need to multiply by 100 not 1000.
C	You need to multiply by 100 not 10.
D	You need to multiply by 100 to be able to write %.

PTS: 1

DIF: Grade 5

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TOP: Number Sense

MSC: LFS & DB-343

15. 5NS1.2 a.3. iii Write this value as a percent: $\frac{3}{4}$

- a. 75 %
- b. 750 %

- c. 30 %
- d. 300 %

ANS: A

$$\frac{3}{4} = 3 \div 4 = 0.75 = 75\%$$

	Feedback
A	Correct!
B	You are off by a factor of 10.
C	You need to find a decimal equivalent and then multiply by 100.
D	Incorrect.

PTS: 1

DIF: Grade 5

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TOP: Number Sense

MSC: LFS & DB-343

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

a. 150 %

c. 30 %

b. 15 %

d. 300 %

ANS: A

$$\frac{3}{2} = 3 \div 2 = 1.5 = 150\%$$

	Feedback
A	Correct!
B	You are off by a factor of 10.
C	You need to find a decimal equivalent and then multiply by 100.
D	Incorrect.

PTS: 1

DIF: Grade 5

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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

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17. 5NS1.2 b.1. What is 80 % of 10?

- a. 8
- b. 80
- c. 1
- d. 800

ANS: A

$$10 \cdot 80\% = 10 \cdot \frac{80}{100} = 8$$

	Feedback
A	Correct!
B	You are off by a factor of 10.
C	You need to multiply 80 and 10 (and then divide by 100).
D	You forgot to divide by 100 to rid of the %.

PTS: 1 DIF: Grade 5

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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

18. 5NS1.2 b.2. What is 65 % of 40?

- a. 26
- b. 210
- c. 6
- d. 21

ANS: A

$$40 \cdot 65\% = 40 \cdot \frac{65}{100} = 26$$

	Feedback
A	Correct!
B	This is off by a factor of at least 10...
C	You need to multiply 65 and 40 (and then divide by 100).
D	Incorrect.

PTS: 1 DIF: Grade 5

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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

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. $2^5 \cdot 3$

c. $5^2 \cdot 1^3$

b. $2^4 \cdot 3$

d. $2 \cdot 3^5$

ANS: A

$$2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 3 = 2^5 \cdot 3 = 96$$

	Feedback
A	Correct!
B	You do not have enough factors.
C	You have the bases and exponents mixed up.
D	You have the exponents mixed up.

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. $2^4 \cdot 5$

c. $4^2 \cdot 1^5$

b. $2^3 \cdot 5$

d. $2 \cdot 5^4$

ANS: A

$$2 \cdot 2 \cdot 2 \cdot 2 \cdot 5 = 2^4 \cdot 5 = 80$$

	Feedback
A	Correct!
B	You do not have enough factors.
C	You have the bases and exponents mixed up.
D	You have the exponents mixed up.

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

