Grade 6 to 7

Review Packet

Summer Use

Add, Subtract, Multiply, and Divide: Fractions—M06.A-N.1.1.1

- Add/Subtract Fractions and Mixed Numbers
- Multiplying/Dividing Fractions
- Fraction Word Problems

Add, Subtract, Multiply, and Divide: Decimals—M06.A-N.2.1.1

- Adding/Subtracting decimals
- Decimals Multiplication and Division
- Decimal Word Problems

Find GCF and LCM of 2 or more numbers—M06.A-N.2.2.1

- Greatest Common Factor and Least Common Multiple (2 pages)

Practice Distributive Property—M06.A-N.2.2.2

- The Distributive Property

Practice with Powers and Exponents—2.1.5.B.1

- Evaluating Exponents

Solving One-Step Equations Using the Properties of Equality—M06.B-E.2.1.4

- Solving One-Step Equations

Order of Operations (PEMDAS) —2.2.6.B.1

- Order of Operations

Add/Subtract Fractions and Mixed Numbers

1. $\frac{4}{3}+\frac{5}{3}$

2. $\frac{2}{5}+\frac{11}{7}$

3. $\frac{4}{3}-\frac{1}{2}$

4. $\frac{1}{3}+\frac{3}{9}$

5. $4\frac{1}{2}-\frac{1}{2}$

6. $1\frac{3}{5}+2\frac{3}{5}$

7. $4\frac{7}{8}-3\frac{5}{7}$

8. $4\frac{5}{7}-3\frac{1}{2}$

9. $2\frac{1}{6}-\frac{1}{3}$

10. $3\frac{1}{4}-1\frac{2}{3}$

Multiplying/Dividing Fractions

1. $\frac{8}{7} \times \frac{7}{10}$

2. $\frac{2}{3} \times \frac{5}{4}$

3. $2 \times \frac{3}{7}$

4. $2\frac{2}{3} \times 4\frac{1}{10}$

5. $2\frac{1}{5} \times 1\frac{3}{4}$

6. $\frac{1}{5} \div \frac{7}{4}$

7. $\frac{1}{2} \div \frac{5}{4}$

8. $\frac{1}{2} \div \frac{8}{7}$

9. $\frac{1}{9} \div 1\frac{1}{3}$

10. $1\frac{6}{7} \div 5\frac{3}{4}$

Fraction Word Problems

1. A city planner has an $\frac{8}{9}$-acre plot of land to develop for the city. She will use the land to make separate sections that each have an area of $\frac{1}{4}$ acre for gardens. What is the greatest number of $\frac{1}{4}$ -acre sections that can be made from the $\frac{8}{9}$-acre plot of land?

2. A number cube has side lengths of $1\frac{1}{4}$ inches. What is the volume, in cubic inches, of the number cube?

3. Andrea buys $\frac{1}{4}$ kilogram of rice. This amount is $\frac{1}{6}$ the amount of rice she has at home. How many kilograms of rice does Andrea have at home?

4. Bruce's uncle is serving hamburgers and lemonade at a picnic. He will use $10\frac{2}{3}$ pounds of ground beef to make the hamburgers. Bruce's uncle grills each hamburger for $9\frac{1}{2}$minutes. He grills each side of a hamburger for the same amount of time. Bruce's uncle has $13\frac{3}{4}$ liters of lemonade. He will pour all the lemonade into glasses so that each glass has$\frac{1}{4}$ liter of lemonade in it. Bruce's uncle writes the equation$13\frac{3}{4}g = \frac{1}{4}$ to calculate the number of glasses (g) needed.

A. What is the greatest number of $\frac{1}{3}$-pound hamburgers Bruce's uncle can make with the ground beef?

B. How many minutes does Bruce's uncle grill each side of a hamburger?

C. Explain the error Bruce's uncle made. As part of your explanation, calculate the number of glasses needed.

Adding/Subtracting decimals

1. $3.6 + 0.43$
2. $7.13 + 3.6$
3. $10.9 - 6.1$
4. $8.1 - 6.92$
5. $19.432 - 17.9$
6. $17.17 - 1.81$
7. $8.5 - 0.96$
8. $8.7 + 3.89 + 12.315$
9. $10.4 + 3.46 - 5$
10. $13.643 + 12.001 - 15.54$

Decimals Multiplication and Division

1. 0.2×1.6

2. 1.7×3.1

3. 5.5×4.87

4. 44.72×8.1

5. 5.928×1.6

6. $4.356 \div 9$

7. $4.4856 \div 2.8$

8. $5.263 \div 0.5$

9. $6.7346 \div 2.23$

10. $1.0109 \div 0.55$

Decimal Word Problems

1. Jane is making chocolate chip cookies for her school's bake sale. She needs one bag of chocolate chips to make 2 dozen cookies. A bag of chips costs $2.89. Jane is planning to make 8 dozen cookies. Write and solve an expression that will tell Jane how much it will cost for the chips to make the cookies?

2. Joey needs to travel 15 miles from Smithville to Clarksville and 5 miles from Clarksville to Elmwood. The table below shows two different taxicab companies' rates.

TAXICAB RATES

Sunshine Cab Co.	Flat rate: $5.00 + $1.00 for every 5 miles
Freedom Cab Co.	Flat rate: $2.50 + $0.50 for every mile over 10 miles

Joey will choose one of these four options:

A. Travel with Sunshine Cab Co. to Clarksville, then with Freedom Cab Co. to Elmwood.

B. Travel with Freedom Cab Co. to Clarksville, then with Sunshine Cab Co. to Elmwood.

C. Travel nonstop with Sunshine Cab Co. the entire way.

D. Travel nonstop with Freedom Cab Co. the entire way.

E. Which is the **least expensive** way for Joey to make the trip?

Greatest Common Factor and Least Common Multiple

1. What is the GCF of 18 and 9?

2. What is the GCF of 24 and 6?

3. What is the GCF of 10 and 30?

4. What is the GCF of 5 and 44?

5. What is the GCF of 15 and 75?

6. What is the GCF of 12 and 40?

7. What is the GCF of 24 and 18?

8. What is the GCF of 18 and 45?

9. What is the GCF of 36 and 90?

10. What is the GCF of 50 and 125?

11. What is the LCM of 38 and 2?

12. What is the LCM of 25 and 75?

13. What is the LCM of 4 and 9

14. What is the LCM of 35 and 21?

15. What is the LCM of 16 and 26?

16. What is the LCM of 30 and 20?

17. What is the LCM of 24 and 10?

18. What is the LCM of 24 and 40?

19. What is the LCM of 18 and 27?

20. What is the LCM of 6 and 40?

The Distributive Property

1. $6(5-1)$

2. $2(5+16)$

3. $8(4+3)$

4. $3(8+6)$

5. $14(10-2)$

6. $6(13-3)$

7. $6(7+11)$

8. $3(7+20)$

9. $6(1+11b)$

10. $10(a-5)$

11. $3(1+2v)$

12. $4(3x+2)$

13. $(3-7k)\cdot 2$

14. $20(8x+20)$

15. $(7+6b)\cdot 15$

16. $(2x+3)\cdot 14$

Evaluating Exponents

1. 2^3

2. 10^3

3. 6^2

4. 3^4

5. 4^0

6. 12^2

7. 3^3

8. 6^3

9. 4^3

10. $7^0 + 5^2$

11. $8^2 - 3^3$

12. $2^3 - 12^0$

13. $2^2 \cdot 2^3$

14. $4^3 - 6^2$

15. $2^4 \cdot 3^2 - 15^0$

Solving One-Step Equations

1. $v - 10 = 9$

2. $v + 7 = 10$

3. $x - 3 = 4$

4. $\frac{x}{5} = 2$

5. $22 = 11k$

6. $13m = 377$

7. $40 = 5p$

8. $8 = p - 13$

9. $198 = 22a$

10. $\frac{a}{29} = 5$

11. $x - 11 = 16$

12. $50 = x + 21$

13. $13 + n = 29$

14. $168 = 84n$

15. $\frac{x}{15} = 11$

16. $8k = 60$

Order of Operations

1. $(30 - 3) \div 3$

2. $(21 - 5) \div 8$

3. $1 + 7^2$

4. $5 \times 4 - 8$

5. $8 + 6 \times 9$

6. $3 + 15 \times 5$

7. $9 \times (3 + 3) \div 6$

8. $(9 + 18 - 3) \div 8$

9. $9 + 6 \div (8 - 2)$

10. $4(4 \div 2 + 4)$

11. $(9 \times 2) \div (2 + 1)$

12. $(4 - 1 + 8 \div 8) \times 5$

13. $(10 \times 2) \div (1 + 1)$

14. $7 \times 9 - 7^2 - 3 \times 4$

15. $8^2 - 1 - (18 - 2) \div 8$

16. $(7 + 1)^2 - 4^2 + 12^0$