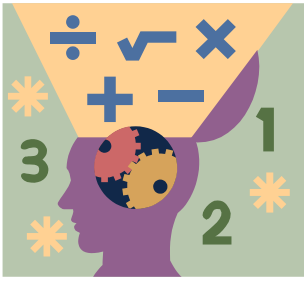
Summer Math Packet

Entering 6th Grade



Enjoy your summer! Please remember to refer to your faithful math binder for help when working on your summer math packet. You can always use the internet for help. A great website www.classzone.com is. There are plenty of others as well. Work hard a little bit of the time to keep up those math skills. Have fun a lot of the time to give yourself a break!

Mrs. Caroline Hamilton

Lesson #1

1. Order the numbers from least to greatest: 45.24, 45.9, 45.444, 45.398, 45.4, 45.39	2. Write the following fractions in lowest terms: A. $\frac{16}{24}$ B. $\frac{36}{60}$	3. Find the least common multiple of the following numbers (LCM): 45 and 9	4. Change to a mixed number: $\frac{100}{29}$
5. Solve. 4,578 X 86	6. Add. 108,956 + 122,462	7. Find the GCF of the following numbers: 80 and 24	8. $63.45 - $18.99
9. Compare. <, >, or =. 345,789__34,579	10. Find the perimeter of the given shape. L= 4 in. and W=3 in. 	SCRATCHWORK:	

Lesson #2

1. 34.56 – 2. 9 =	2. 45,887 x 3 =	3. Your peppermint plant is $\frac{3}{10}$ inch tall. After one week, it is $\frac{1}{2}$ inch tall. How much did the plant grow in one week?	4. Solve. $\frac{5}{9} \times \frac{12}{15}$
5. $6\frac{3}{4} + 3\frac{1}{5} =$	6. Find the GCF of the following numbers. 60 and 28	7. 984 + 32.1 =	8. Which digit is in the ten millions place? 204,567,000,345
9. Compare <, >, or =. 34.1 ___ 34.100	10. Solve. $13 - \frac{3}{8} =$	SCRATCHWORK:	

Lesson #3

1. Solve. $2 + (64 - 58) \times 7$	2. Sandy had $ 50 in her purse. She bought a shirt for $12.98, a pair of pants for $20, and shoes for $15.20. How much change did she receive?	3. Solve. 450,000 - 123,678	4. $4\frac{1}{5} - 3\frac{2}{3} =$
5. Solve. 985 2,098 +4,347	6. A clown is $5\frac{3}{4}$ ft tall while barefoot and $1\frac{1}{3}$ ft taller while wearing stilts. How tall is the clown while wearing stilts?	7. Write the following in exponential form. 7 x 7 x 8 x 9 x 9 x 9	8. A shoemaker has $1\frac{3}{4}$ yards of leather. He uses $\frac{2}{3}$ of the leather. How many yards are used?
9. Compare. <, >, or =. $\frac{4}{12}$ ____ $\frac{6}{11}$	10. Solve. 45,980 X 24	SCRATCHWORK:	

Lesson #4

1. Subtract. 13,461 - 9,836	2. Simplify. A. $\frac{98}{6}$ B. $\frac{60}{90}$ C. $\frac{24}{4}$	3. Find the GCF of the given numbers. 120 and 36	4. 897.15 ÷ 15 =
5. Ali kicked a soccer ball 13.48 m. What is 13.48 rounded to the nearest tenth?	6. Solve. $9 - 4\frac{3}{10} =$	7. Solve. 12,364 ÷ 4 =	8. Reggie played two piano pieces at a recital. Each piece was $5\frac{1}{2}$ minutes long. How long are the two piano pieces combined?
9. Write the following number in expanded form. 792.03	10. An average person's upper leg bone measures 19.88 inches and the lower leg bone measures 16.94 inches. How much longer is the upper leg bone than the lower leg bone?	SCRATCHWORK:	

Lesson #5

1. Solve. $9\frac{2}{3} - 4\frac{3}{4} =$	2. Kay went to Lakeside Mall. She had $75 to spend. She purchased 3 items which cost $12.75, $32.57, and $21.84. How much more does she have to spend?	3. Solve. Simplify. $1\frac{2}{5} \times 2\frac{6}{7} =$	4. $z = 3\frac{5}{6}$ & $y = 6\frac{1}{4}$ Evaluate the expression: $y - z$
5. Use the same values for z and y from #4. Evaluate the expression: $y + z$	6. Use the same values for z and y from #4. Evaluate the expression: $y \times z$	7. Use the same values for z and y from #4. Evaluate the expression: $y \div z$	8. Evaluate the expression for $x = 6$ and $y = 17$. $x + (20 - y)$
9. Solve. $48 - 2.658 =$	10. Fred has to read a book for a test in 2 weeks. If he reads the same number of pages per day and the book has 350 pages, how many pages each day does he need to read?	SCRATCHWORK:	

Lesson #6

1. Put the following numbers in order form least to greatest. 8.97, 9.1, 8.09, 8.9, 9.09	2. Convert the mixed numbers to improper fractions. $2\frac{3}{4}$ = $4\frac{1}{5}$ = $6\frac{2}{3}$ =	3. Rick said $\frac{3}{5}$ of the movies people went to see this weekend were new releases. If there were 55 movies out, how many were new releases?	4. Add these decimals. 32.1, 2.69, 3.44, 11.6
5. Cancel then multiply. $\frac{12}{15} \times \frac{30}{36}$ =	6. Solve. Write your answer as a decimal. 1,597 ÷ 25 =	7. Solve. 892.45 x 0.25 =	8. Round to the tenths place. 456.087
9. Compare. <, >, or =. $\frac{2}{7}$ ____ $\frac{3}{8}$ $2\frac{1}{2}$ ____ $2\frac{1}{3}$ $\frac{3}{7}$ ____ $\frac{4}{9}$	10. Add. $\frac{15}{20}$ + $\frac{1}{5}$	SCRATCHWORK:	

Lesson #7

1. Charles baked 480 cookies. He wanted to give each class the same number of cookies. If he has 20 classes to feed, how many cookies will each class receive?	2. Solve. 32,908 x 46 =	3. Solve. $2\frac{2}{3} - 1\frac{3}{4} =$	4. Solve. 367 – 23.79 =
5. Add. Simplify. $\frac{4}{6} + \frac{5}{12} =$	6. Find the GCF of the following numbers: 72 and 48	7. Solve using order of operations. $6 - 12 \div 3 + (15-7)$	8. Solve. 8.99 x 3.2 =
9. Solve. 6.42 x 14.5 =	10. Solve. 86.24 ÷ 28 =	SCRATCHWORK:	

Lesson #8

1. Solve. 65,900 – 23,477 =	2. Solve. $\frac{7}{8} + \frac{9}{10} =$	3. Solve. 400 – 12.98 =	4. Find the GCF and LCM of 12 and 16. GCF = LCM =
5. Order the fractions from least to greatest. *Find a common denominator first $\frac{7}{8}, \frac{2}{3}, \frac{1}{6}, \frac{4}{18}$	6. Round to the ones place. 78.857	7. Simplify the following fractions. a. $\frac{60}{120}$ b. $\frac{80}{22}$ c. $\frac{20}{55}$	8. Sara went to the fair with $15. On the first day she ate four items costing $0.75 each. She played 9 games that cost $0.50 and 4 games that cost $1.00. How much money does she have to start the second day at the fair?
9. There are 21 classrooms at Pine School. There are 32 students per room. Give an <u>estimate</u> of the total number of students in the school.	10. Solve. a. $s + 456 = 900$ b. $c - 45 = 136$ c. $30 - a = 10$	SCRATCHWORK:	

Lesson #9

1. Simplify the following fractions. $\frac{30}{40}$ = $1\frac{12}{24}$ = $5\frac{12}{30}$ =	2. Solve. Write your answer as a decimal. 75,825 ÷ 31 =	3. Charlie's goal is to use less than 50 gallons of water per day. His water bill for the month showed that he used 1,524 gallons of water in 30 days. Did Charlie meet his goal this month? Explain.	4. Give the place value of the number 2 in each of the following 3 numbers. 1. 35,684,381.762 2. 42,859 3. 75,924,970.46
5. Add. $6\frac{7}{8} + 2\frac{3}{4}$ =	6. Add. $\frac{20}{30} + \frac{5}{6}$ =	7. Find the area of the following figures. 1. square with 4 cm sides 2. rectangle with L =3 cm and W = 5 cm	8. Use your divisibility rules to determine if 2,3,4,5,6,9, or 10 go evenly into these numbers. 1. 38,280 2. 945 3. 683
9. 1,298 × 68 =	10. 25,000,120 <u>- 9,876,121</u>	SCRATCHWORK:	

Lesson #10

1. Solve. $\frac{5}{6} \times 9\frac{1}{2} =$	2. Write the reciprocal of the following fractions. a. $\frac{4}{5}$ b. $\frac{3}{5}$ c. $\frac{40}{6}$	3. Solve. $5\frac{1}{2} \div 3\frac{2}{3} =$	4. Line up the numbers correctly then add. 3.6; 4.24; 23.9; 0.987
5. Find the GCF of 24 and 18	6. Find the area of a square whose sides equal 5 cm.	7. Is the following number divisible by 2, 3, 4, 5, 6, 9, 10 45,600	8. Solve. 13,987 x 25 =
9. Compare. <, >, or =. $\frac{4}{5}$ _____ $\frac{6}{8}$	10. Write the prime factorization in numerical order and exponential form: 45	SCRATCHWORK:	

Lesson #11

1. The movie began at 7:30 and lasted 90 minutes. At what time did the movie end?	2. Solve. $14\frac{6}{11} + 2\frac{7}{22} =$	3. Solve. 60,275 + 24,845=	4. Solve. 125 x 214 =
5. Find the missing number to make the fractions equivalent. a. $\frac{5}{8} = \frac{x}{16}$ b. $\frac{x}{10} = \frac{20}{50}$ c. $\frac{14}{x} = \frac{2}{4}$	6. Solve. $\frac{28}{36} \times 9 =$	7. Dana wants to buy a computer that costs $1,236. She works at the grocery store where she earns $11 an hour. How many hours will she have to work to earn enough money to purchase the computer?	8. Solve. $5\frac{1}{2} \times \frac{22}{33} =$
9. Solve. 78.4 ÷ 0.14 =	10. Simplify. a. $\frac{45}{90}$ b. $\frac{86}{9}$ c. $\frac{16}{24}$	SCRATCHWORK:	

Lesson #12

1. Solve. $36 \div (2 + 4) \times 9 - 3 =$	2. Solve. $30 - (10 \times 2) + 7 \times 4$	3. Solve. $782.43 \div 33 =$	4. Claire drove 2.9 miles to the north, 3.4 miles to the east, and 3.7 miles to the south. How many miles did she drive in all?
5. What is the GCF for the numbers: 36 and 42	6. Solve. $8.32 \times 34.7 =$	7. What is the perimeter of an object with sides that equal 2 in, 3 in, 3.5 in, 1.5 in, and 3 in?	8. If a student got 17 problems out of 25 problems correct on a test, what percentage of problems did she get correct?
9. Solve. $\frac{4}{6} \times \frac{6}{18} =$	10. Solve. $3{,}600 \div 60 =$ $45{,}000 \div 900 =$ $270{,}000 \div 3{,}000 =$	SCRATCHWORK:	

Lesson #13

1. Solve. $3 - 6 \div 2 + (24 - 6)$	2. Solve. 4^3 = 10^5 = 3^4 = 6^2 =	3. Solve. 35,987 x 63 =	4. Al and Bob each go to the store to buy school supplies. Al buys 11 colored pencils for $0.69 each and Bob buys 3 packs of folders for $2.70 per pack. Who spent more at the store? Explain.
5. Mark bought a notebook for $1.59, some filler paper for $0.89, and 3 pens at $0.49 each. How much did Mark spend on supplies?	6. Solve. $9\frac{1}{3} - 3\frac{2}{3}$ =	7. If you buy a digital music player for $246, including tax, and are allowed to pay for it in 6 equal payments, how much will each payment be?	8. Find the perimeter of a square whose side equals 4.5 inches.
9. Simplify. $\frac{45}{60}$	10. Solve. $4\frac{2}{15} - 3\frac{3}{4}$ =	SCRATCHWORK:	

Lesson #14

1. Michelle has a recipe that calls for 2 $\frac{1}{2}$ cups of vegetable oil. She wants to use $\frac{2}{3}$ of that amount of oil and use applesauce to replace the rest. How much vegetable oil will she use?	2. $25 \times \frac{1}{5} =$	3. Solve. $263 \times 5 =$	4. John has 1 $\frac{1}{2}$ hours of homework from Monday through Thursday and 2 $\frac{3}{4}$ hours over the weekend. How much homework does he have in a week?
5. Tell if the number is divisible by 2, 3, 4, 5, 6, 9, 10 45,762	6. There are 3 feet in 1 yard. How many feet are in 5 yards?	7. Solve. $10\frac{1}{5} - 6\frac{3}{4} =$	8. Solve. $\frac{9}{20} - \frac{4}{15} =$
9. Tom bought 8 chicken breasts and 5 steaks. Each chicken breast weighed 0.35 pounds and each steak weighed 1.25 pounds. How many pounds of meat did Tom buy?	10. Solve. $12 - 6\frac{4}{5} =$	SCRATCHWORK:	

Lesson #15

1. Write an equivalent fraction. $\frac{4}{5}$ $\frac{1}{3}$	2. Find the missing number to make the fractions equal. $\frac{2}{3} = \frac{n}{12}$	3. Solve. $1\frac{5}{6} \times 2\frac{3}{4} =$	4. Solve. $6 - 1\frac{1}{2} =$
5. Solve. Write the answer as a mixed number. 45,987 ÷ 30 =	6. Write as a mixed number. $\frac{91}{9}$	7. Solve. 3,987,344 + 9,345,109	8. Solve. Cancel before you multiply. $\frac{30}{40} \times \frac{48}{60} =$
9. Solve using order of operations. (21 x 7) – 15 + 29 =	10. Solve. $\frac{7}{24} \times \frac{18}{13} \times \frac{16}{21} =$	SCRATCHWORK:	

Lesson #16

1. Louis walks 2 miles on Monday, 3 miles on Wednesday, and 2.5 miles on Saturday. He wants to walk 10 miles each week. Did he meet his goal? If not, how much more should he have walked?	2. Solve using order of operations. 25 x 3 + 6 x 2 - 38	3. Solve. 20^3	4. Solve. $2\frac{2}{9} \times 4\frac{4}{5} =$
5. Solve. $\frac{8}{9} + \frac{4}{6} =$	6. Write as an improper fraction. $10\frac{1}{3}$	7. Solve. 65,000,001 - 43,122,008	8. Solve. $\frac{2}{3} \times 15 =$
9. Solve. 3.98 + 46 =	10. Find the GCF of 15 and 25. Find the LCM of 15 and 25.	SCRATCHWORK:	

5th Grade Summer Packet

Answer Key

LESSON 1: 1. 45.24, 45.39, 45.398, 45.4, 45.444, 45.9 2. a. $\frac{2}{3}$ b. $\frac{3}{5}$ 3. LCM = 45 4. $3\frac{13}{29}$ 5. 393,708 6.231,418 7. GCF = 8 8. $44.46 9. > 10. 14 in.

LESSON 2: 1. 31.66 2. 137,661 3. $\frac{1}{5}$ inch 4. $\frac{4}{9}$ 5. $9\frac{19}{20}$ 6. GCF = 4 7. 1,016.1 8. 6 9. = 10. $12\frac{5}{8}$

LESSON 3: 1. 44 2. $1.82 3. 326,322 4. $\frac{8}{15}$ 5. 7,430 6. $7\frac{1}{12}$ feet 7. $7^2 \times 8 \times 9^3$ 8. $1\frac{1}{6}$ yards 9. < 10. 1,103,520

LESSON 4: 1. 3,625 2. a. $16\frac{1}{3}$ b. $\frac{2}{3}$ c. 6 3. GCF = 12 4. 59.81 5. 13.5 m 6. $4\frac{7}{10}$ 7. 3,091 8. 11 minutes 9. $(7 \times 100) + (9 \times 10) + (2 \times 1) + (3 \times \frac{1}{100})$ 10. 2.94

LESSON 5: 1. $4\frac{11}{12}$ 2. $7.84 3. 4 4. $2\frac{5}{12}$ 5. 10 ½ 6. $23\frac{23}{24}$ 7. $1\frac{29}{46}$ 8. 9 9. 45.342 10. 25 pages each day

LESSON 6: 1. 8.09, 8.9, 8.97, 9.09, 9.1 2. $\frac{11}{4}$, $\frac{21}{5}$, $\frac{20}{3}$ 3. 33 new releases 4. 49.83 5. $\frac{2}{3}$ 6. 63.88 7. 223.1125 8. 456.1 9. <, >, < 10. $\frac{19}{20}$

LESSON 7: 1. 24 cookies 2. 1,513,768 3. $\frac{11}{12}$ 4. 343.21 5. $1\frac{1}{12}$ 6. GCF = 24 7. 10 8. 28.768 9. 93.09 10. 3.08

LESSON 8: 1. 42,423 2. $1\frac{31}{40}$ 3. 387.02 4. GCF=4 LCM=48 5. $\frac{1}{6}, \frac{4}{18}, \frac{2}{3}, \frac{7}{8}$ 6. 79 7. a. ½ b. $3\frac{7}{11}$ c. $\frac{4}{11}$ 8. $3.50 9. About 600 students 10. a. 444 b. 181 c. 180

LESSON 9: 1. $\frac{3}{4}$, 1 ½, $5\frac{2}{5}$ 2. 2,527.5 3. No, he used about 51 gallons per day. 4. thousandths, thousands, ten thousands 5. $9\frac{5}{8}$ 6. 1 ½ 7. $16cm^2$, $15cm^2$ 8. 1. 2,3,4,5,6,10 2. 3,5,9 3. None 9. 88.264 10. 15,123,999

LESSON 10: 1. $7\frac{11}{12}$ 2. a. $\frac{5}{4}$ b. $\frac{5}{3}$ c. $\frac{6}{40}$ 3. 1 ½ 4. 32.727 5. GCF = 6 6. $25cm^2$ 7. 2, 3, 4, 5, 6, 10 8. 349,675 9. > 10. 3 x 3 x 5 ; $3^2 \times 5$

LESSON 11: 1. 9:00 2. $16\frac{19}{22}$ 3. 85,120 4. 26,750 5. a. 10 b. 4 c. 28 6. 7 7. 113 hours 8. $3\frac{2}{3}$ 9. 560 10. $\frac{1}{2}$, $9\frac{5}{9}$, $\frac{2}{3}$

LESSON 12: 1. 51 2. 30 3. 23.71 4. 10 miles 5. GCF = 6 6. 288.704 7. 13 in. 8. $\frac{17}{25}$ 9. $\frac{2}{9}$ 10. 60; 50; 90

LESSON 13: 1. 18 2. 64; 100,000; 81; 36 3. 2,267,181 4. Bob. He spent $8.10 and Al spent $7.59. 5. $2.97 6. $5\frac{2}{3}$ 7. $41.00 8. 20.25 in^2 9. $\frac{3}{4}$ 10. $\frac{5}{12}$

LESSON 14: 1. $1\frac{2}{5}$ cups 2. 4 3. 1,315 4. $8\frac{3}{4}$ hours 5. 2,3,6 6. 15 feet 7. $3\frac{9}{20}$ 8. $\frac{11}{60}$ 9. 9.05 pounds 10. $5\frac{1}{5}$

LESSON 15: 1. Answers may vary 2. n = 8 3. $4\frac{7}{12}$ 4. $4\frac{1}{2}$ 5. 1,532 $\frac{9}{10}$ 6. 10 $\frac{1}{9}$ 7. 13,332,453 8. $\frac{3}{5}$ 9. 161 10. $\frac{4}{13}$

LESSON 16: 1. No, 2.5 more miles 2. 49 3. 8,000 4. 10 $\frac{2}{3}$ 5. $1\frac{5}{9}$ 6. $\frac{31}{3}$ 7. 21,877,993 8. 10 9. 49.98 10. GCF=5, LCM=75