SOUTH KINGSTOWN SCHOOL DEPARTMENT
BROAD ROCK MIDDLE SCHOOL
351 BROAD ROCK ROAD, WAKEFIELD, RI 02879-2195
PHONE (401) 360-1800 FAX (401) 360-1801

Tammy J. McNeiece, Principal
Ryan Borden, Assistant Principal

Parents and Students entering sixth grade!

We hope the students enjoyed their 5th-grade year and are excited about the new adventures of sixth grade. Research shows that students lose 2-3 months of grade-level math equivalency over the summer. We would like to help you keep those skills that you learned over this past year. The math department has prepared a packet of handouts that cover the basic skills required to have a successful transition into 6th-grade math. The packet includes a general review of skills and concepts already taught this past year and averages to approximately one side of a handout per week during the summer break. We hope that this assignment will provide an opportunity for you to further develop and master your skills throughout the summer and to help you begin the new school year with great success.

The assignment should be completed and turned in by the first Friday, September 9th, 2022.

If you have any questions regarding the summer work you may contact Mrs. Porter at nporter@sksd-ri.net over the summer.

Have a wonderful summer! See you in September!

Sincerely,
Nykki Porter
Math Curriculum Coordinator
Broad Rock Middle School

There are GREAT resources on the next page for your child and families to extend their learning through online programs, websites and books!!

Websites to Explore:

MobyMax.com - Most students have accounts and have used this program throughout fifth grade. (A great place to go to close learning gaps)

The Math Forum - The Math Forum includes a wonderful Student Center which allows students to choose resources and grade level material they find challenging or interesting. A help area called Ask Dr. Math, an Internet Math Hunt, and Math Tips & Tricks, which includes "BeatCalc", are just a few of the wonderful resources.

Cool Math For Kids - This website provides a variety of games that explore probability and "race the clock" which allows you to practice basic computation skills. There are also several IQ games and brain thinkers that foster your ability to think logically.

The Quiz - This website provides math activities listed by concept and skills for all grade levels.

Math Playground - An action-packed site for middle school students to practice math skills, play a logic game and have some fun.

Math Illuminations, National Council of Mathematics - Choose a grade range to access activities and games.

Figure this - This site is designed to challenge middle school students with real world challenges.

Kids.Gov - This website is the official kids' portal for the U.S. government. It is divided into educational subject like Arts, Math, and History.

Great Math Books to Read:

❑ A Gebra Named Al by Windy Isdell
❑ Math Curse by Jon Scieszka
❑ Chasing Vermeer by Blue Balliett
❑ Sir Cumference & the Dragon of Pi by Cindy Neuschwander
❑ Sir Cumference & the First Roundtable by Cindy Neuschwander
❑ Sir Cumference & the Great Knight of Angleland by Cindy Neuschwander
❑ Sir Cumference & the Sword in the Cone by Cindy Neuschwander
❑ Number Devil: A Mathematical Adventure by Hans Magnus Enzensberger
❑ Counting on Frank by Rod Clement
❑ Guinness Book of Records by Time Inc

Multiplication Practice

Find the product.

1. 231 $\times$ 3	**2.** 412 $\times$ 2	**3.** 112 $\times$ 4	**4.** 332 $\times$ 3	**5.** 212 $\times$ 4
6. 769 $\times$ 8	**7.** 825 $\times$ 6	**8.** 892 $\times$ 8	**9.** 483 $\times$ 9	**10.** 536 $\times$ 7
11. 849 $\times$ 8	**12.** 675 $\times$ 9	**13.** 892 $\times$ 5	**14.** 684 $\times$ 7	**15.** 324 $\times$ 8

Find the product. Use mental math if possible.

16. 18 $\times$ 70	**17.** 56 $\times$ 20	**18.** 49 $\times$ 30	**19.** 37 $\times$ 50	**20.** 24 $\times$ 10

Find the product.

21. 53 $\times$ 25	**22.** 46 $\times$ 47	**23.** 90 $\times$ 58	**24.** 38 $\times$ 57	**25.** 28 $\times$ 16
26. 456 $\times$ 13	**27.** 308 $\times$ 18	**28.** 764 $\times$ 46	**29.** 354 $\times$ 55	**30.** 418 $\times$ 23

1

Name _____ Date _____

Multiplication Using Mental Math

Use a base fact and mental math to help you find the product.

1. $10 \times 8 =$ _____
    $100 \times 8 =$ _____
    $100 \times 80 =$ _____

2. $7 \times 60 =$ _____
    $70 \times 60 =$ _____
    $700 \times 60 =$ _____

3. $60 \times 9 =$ _____
    $600 \times 9 =$ _____
    $600 \times 90 =$ _____

Find the product.

4. 60
    $\times\ 10$

5. $2,000$
    $\times\ 400$

6. $8,000$
    $\times\ 70$

7. 600
    $\times\ 800$

8. $30,000$
    $\times\ 600$

MIXED APPLICATIONS

9. An adult person's heart beats about 70 times a minute. About how many times does the heart beat in 60 minutes?

   _____

10. A dog's heart beats about 100 times a minute. About how many times does a dog's heart beat in 20 minutes?

    _____

11. An infant's heart beats about 120 times a minute. The heart of a nine-year-old child beats about 90 times a minute.

    a. About how many times does an infant's heart beat in 60 minutes? _____

    b. In 60 minutes, an infant's heart beats about how many more times than the heart of a nine-year-old child? _____

NUMBER SENSE

Compare. Write $<$, $>$, or $=$.

12. 40×60 $\bigcirc$ 4×600

13. 30×80 $\bigcirc$ $3 \times 8,000$

14. 70×80 $\bigcirc$ 7×80

15. 60×70 $\bigcirc$ 6×700

2

6th grade uses traditional long division.

Divide
Multiply
Subtract
Check
Bring down

$$12\overline{)7981} 665\,{}^1\!/_{12}$$

$$-72\downarrow$$
$$78$$
$$-72\downarrow$$
$$61$$
$$-60$$
$$1 \text{ remainder}$$

$7981 \div 12 = \boxed{665\,{}^1\!/_{12}}$

Find the quotient.

1.

$8\overline{)4,050}$

2.

$9\overline{)6,633}$

3.

$11\overline{)2,780}$

4.

$7\overline{)6,062}$

5.

$12\overline{)1,846}$

6.

$6\overline{)9,972}$

7.

$4\overline{)8,052}$

8.

$3\overline{)4,686}$

9.

$13\overline{)7,200}$

3

Name _____ Date _____

Mixed Numbers and Fractions

Find the missing digits.

1. $\frac{7}{3} = 2\frac{1}{\square}$

2. $\frac{29}{6} = \square\frac{5}{6}$

3. $\frac{38}{5} = \square\frac{3}{5}$

4. $9\frac{2}{3} = \frac{\square}{3}$

5. $\frac{30}{7} = \square\frac{2}{7}$

6. $\frac{14}{5} = 2\frac{\square}{5}$

7. $11 = \frac{\square}{4}$

8. $9 = \frac{\square}{1}$

Write the fraction as a mixed number or a whole number.

9. $\frac{41}{8}$ _____

10. $\frac{7}{3}$ _____

11. $\frac{29}{11}$ _____

12. $\frac{15}{4}$ _____

13. $\frac{41}{9}$ _____

14. $\frac{27}{3}$ _____

15. $\frac{76}{12}$ _____

16. $\frac{81}{3}$ _____

17. $\frac{37}{14}$ _____

18. $\frac{47}{16}$ _____

Write the mixed number as an improper fraction.

19. $9\frac{1}{7}$ _____

20. $5\frac{7}{9}$ _____

21. $2\frac{3}{4}$ _____

22. $6\frac{2}{7}$ _____

23. $4\frac{9}{11}$ _____

24. $3\frac{3}{8}$ _____

25. $1\frac{9}{10}$ _____

26. $8\frac{1}{8}$ _____

27. $6\frac{7}{11}$ _____

28. $5\frac{4}{7}$ _____

MIXED APPLICATIONS

29. I am a fraction that is greater than 1 but less than 2. The sum of my numerator and denominator is 11. My denominator subtracted from my numerator is 1. What fraction am I?

_____

30. Joy has $\frac{3}{4}$ cup of milk. She says that she has nine-sixteenths cup of milk. Is Joy correct? Explain.

_____

MIXED REVIEW

Find each product or quotient. Use mental math if possible.

31. $6.2 \times 0.3 =$ _____

32. $0.7\overline{)2.45} =$ _____

33. $5\overline{)5.45} =$ _____

34. $0.78 \times 0.05 =$ _____

Write the fraction in simplest form.

35. $\frac{20}{25}$ _____

36. $\frac{2}{8}$ _____

37. $\frac{12}{36}$ _____

38. $\frac{10}{10}$ _____

4

Adding Fractions

$2\frac{1}{3}$
$+\ 3\frac{3}{4}$ ⎱ LCD is 12
___
5

① LCD is 12

②
$\frac{1*4}{3*4}\ \frac{4}{12}$

$\frac{3*3}{4*3}\ \frac{9}{12}$

③
$\frac{4}{12}$
$+\ \frac{9}{12}$
___
$\frac{13}{12} = 1\frac{1}{12}$

① Find the least common denominator (LCD).

② Rewrite each fraction using the LCD. (equivalent fraction)

③ Add

④ Simplify (Rename as a mixed number)

$5 + 1\frac{1}{12} = 6\frac{1}{12}$

Find the sum.

1. $3\frac{1}{4} + 3\frac{5}{8} =$ _____

2. $9\frac{9}{10} + 2\frac{3}{5} =$ _____

3. $8\frac{7}{9} + 5\frac{9}{11} =$ _____

4. $6\frac{2}{7} + 7\frac{1}{2} =$ _____

5. $10\frac{8}{10} + 9\frac{7}{12} =$ _____

6. $3\frac{7}{8} + 3\frac{1}{3} =$ _____

7. $4\frac{8}{10} + 5\frac{2}{6} =$ _____

8. $3\frac{3}{9} + 7\frac{6}{11} =$ _____

5

Subtracting Fractions

$2 \frac{6}{9}$ ①

$\quad$ LCD is 45.

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

$2 \frac{6}{9} \times \frac{5}{5} = 2 \frac{30}{45}$

$- 1 \frac{2}{5} \times \frac{9}{9} = 1 \frac{18}{45}$

$1 \frac{12 \div 3}{45 \div 3} = 1 \frac{4}{15}$

① Find least common denominator (LCD)

② Rewrite each fraction using LCD (Equivalent fraction)

③ Subtract

④ Simplify

Find the difference.

1. $16 \frac{3}{9} - 10 \frac{2}{5} =$ _____

2. $7 \frac{5}{12} - 2 \frac{1}{2} =$ _____

3. $13 \frac{1}{8} - 12 \frac{10}{12} =$ _____

4. $18 \frac{1}{2} - 17 \frac{2}{8} =$ _____

5. $20 \frac{3}{4} - 18 \frac{2}{3} =$ _____

6. $19 \frac{7}{10} - 13 \frac{4}{10} =$ _____

7. $17 \frac{5}{6} - 1 \frac{3}{5} =$ _____

8. $9 \frac{1}{5} - 5 \frac{4}{6} =$ _____

6

Read and answer each question. Show your work!

Mixed Practice #1

1. Ellen had 12,080 Legos, but she lost 417 Legos. How many Legos does she have now?

2. Arthur baked 115 muffins, which was 17 more muffins than Ann. How many muffins did Ann bake?

3. In the summertime, you can earn $4 a day by cutting the grass. How many days will it take you to earn $184?

4. Willy has 5,092 crayons. Lucy has 3,971 crayons. How many more crayons does Willy have than Lucy?

5. The turtle at the zoo weighs 145 pounds. It is five times heavier than the baby turtle. How much does the baby turtle weigh?

7

Ginny took the money she earned babysitting and went to the movies. She spent $3.90 for her ticket. Then, she spent half of the remaining money on popcorn. On the way home she bought an ice-cream cone for $1.49. When she got home, she had $0.81 left of her earnings. How much did she earn babysitting?

$0.81	→	Start with the money left over.
+ 1.49	→	Add money spent on ice cream cone.
2.30	→	half of remaining money
+ 2.30	→	Add other half of money spent on popcorn.
4.60	→	money remaining after buying ticket
+ 3.90	→	Add money spent on ticket.
$8.50	→	money that Ginny earned babysitting

Solve each problem.

1. An owner of a retail clothing store bought a dress for $36.25 and sold it for $59.99. What was her profit?

2. A pair of running shoes costs $22.29. The store owner wanted to make a profit of $18.50. What should be the shoes' selling price?

3. Malcolm spent $48.74 on new speakers and $25.39 on computer games. After his purchases, he only had $0.58 left. How much money did Malcolm have before he went shopping?

4. In the town of Sleepy Oak, the fine for a speeding ticket is $32.65 + s dollars, where s is the miles per hour over the speed limit.

   A. What is the fine for going 38.4 miles per hour in a 25-miles-per-hour school zone?

   B. Mr. Taylor was fined $50.15 for speeding in the same school zone. How fast was he driving?

5. Hailey received some cash for her birthday. She spent $14.48 on a CD and donated $25.00 to charity. She put half of what was left into her savings account. She has $17.76 left. How much did she receive on her birthday?

☐ I can solve real-world problems by adding and subtracting decimals.

Multiplying Fractions

Example: $5\frac{1}{4} * \frac{1}{3}$

① $\frac{21}{4} * \frac{1}{3}$

② $\frac{21}{4} * \frac{1}{3} = \frac{21}{12}$

③ $\frac{21}{12} = \frac{\div 3}{\div 3} = \frac{7}{4} = \boxed{1\frac{3}{4}}$

① Convert all mixed numbers to improper fractions.

② Multiply the numerators together then the denominators together.

③ Simplify. (Rename if needed)

* Remember you do not find common denominators when Multiplying fractions.

Find the product.

① $3\frac{2}{8} \times \frac{9}{10} =$ _____

② $1\frac{1}{3} \times \frac{3}{8} =$ _____

③ $1\frac{4}{12} \times \frac{2}{12} =$ _____

④ $3\frac{1}{8} \times \frac{1}{4} =$ _____

⑤ $2\frac{1}{2} \times \frac{3}{6} =$ _____

⑥ $3\frac{1}{6} \times \frac{1}{2} =$ _____

⑨

⑦ $3\frac{1}{5} \times \frac{4}{9} =$

⑧ $2\frac{1}{2} \times \frac{1}{4} =$

Dividing Fractions   *Challenge Activity*

Dividing any number is the same as multiplying by its reciprocal.

Example:

$$\frac{1}{4} \div 6 =$$

$$\frac{1}{4} * \frac{1}{6} =$$

$$\boxed{\frac{1}{24}}$$

"KCR"

① Keep the first fraction (Keep)

② Change the division sign (Change) to a multiplication sign

③ Find the reciprocal of (Reciprocal) the second number.

④ Multiply the two fractions

⑤ Simplify (Rename if needed)

Divide.

①. $\frac{10}{12} \div 1 =$ _____

②. $7 \div \frac{2}{3} =$ _____

③ $\frac{4}{8} \div 8 =$ _____

④ $\frac{2}{6} \div 4 =$ _____

⑤. $5 \div \frac{3}{12} =$ _____

⑥ $4 \div \frac{1}{2} =$ _____

⑦. $\frac{1}{8} \div 1 =$ _____

⑧. $\frac{3}{4} \div 1 =$ _____