

Name: _____

7th Grade

Summer Math Packet

Dear Students,

The math skills you have learned in sixth grade must be reviewed over the summer so that you will be ready for seventh grade pre-algebra. This packet is a review of concepts that we covered this year.

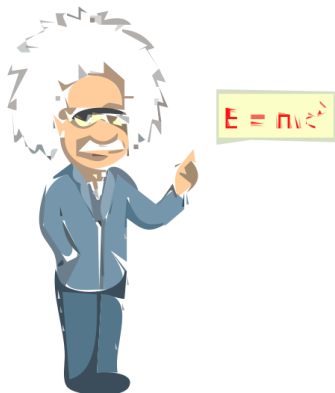
Show your work in the spaces provided. If you need to use extra paper please do so. Complete a couple of pages each week. Space it out over the summer.

The answer key is the last page of the packet.

Have a great summer!

Mrs. Sevin

Mrs. Hamilton



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| <p>1. Write 7,000,000 in words.</p> | <p>2. Round 48,377 to the nearest thousand.</p> | <p>3. Add $632 + 577 + 298$</p> |
| <p>4. Subtract $6000 - 3956$</p> | <p>5. Multiply 37×26.</p> | <p>6. Divide $4036 \div 25$. Write your remainder as a fraction.</p> |
| <p>7. 12 CD's cost \$30. How much will 18 CD's cost?</p> | <p>8. Paul ran 400 yards. How many feet did he run?</p> | <p>9. Subtract $6025 - 1773$.</p> |
| <p>10. Multiply 248×72.</p> | <p>11. Solve $\frac{n}{25} = 42$</p> | <p>12. Convert: 6.5 yards = _____ feet</p> |

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| <p>1. Give the quotient. Round to the nearest hundredth.</p> $41.53 \div 2.7$ | <p>2. Solve. $\frac{n}{6} = 12$</p> | <p>3. What is the least common multiple of 9 and 12?</p> |
| <p>4. $7\frac{3}{4} - 5\frac{1}{6}$</p> | <p>5. $\frac{7}{8} \div \frac{1}{4}$</p> | <p>6. $3\frac{5}{12} + 2\frac{1}{3}$</p> |
| <p>7. $6 - 2\frac{3}{7}$</p> | <p>8. $0.23 \times 10 = \underline{\hspace{2cm}}$ $0.23 \times 100 = \underline{\hspace{2cm}}$ $0.23 \times 1000 = \underline{\hspace{2cm}}$</p> | <p>9. $5^2 = \underline{\hspace{2cm}}$ $12^2 = \underline{\hspace{2cm}}$ $4^3 = \underline{\hspace{2cm}}$ $(\frac{1}{3})^3 = \underline{\hspace{2cm}}$</p> |
| <p>10. $8003 - 4297$</p> | <p>11. Find the GCF of the following numbers: 8, 16</p> | <p>12. Evaluate the expression $12 \div (1 + 3^3 - 2^4)$</p> |

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| 1. Simplify $(20 + 4) \div 2 \cdot 2$ | 2. Round 67.751 to the nearest one. | 3. Add. $3.98 + 42.7$ |
| 4. Subtract $5.007 - 0.389$ | 5. Alan bought five 12 cent stamps and twenty 18 cent stamps. What was the total cost of the stamps? | 6. Round 5.3692 to the nearest thousandth. |
| 7. Find the sum. $82.5 + 6.98$ | 8. Find the difference. $38.2 - 3.45$ | 9. Find the <i>perimeter</i> of a rectangle whose <i>area</i> is 132 mm^2 and <i>base</i> is 12 mm. |
| 10. Solve $x + 33 = 70$ | 11. $5\frac{1}{2} + 2\frac{3}{4}$ | 12. $8\frac{1}{4} - 2\frac{5}{8}$ |

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| 1. $\frac{2}{3} \times 6$ | 2. $2\frac{3}{8} \div 1\frac{1}{3}$ | 3. Divide $14,280 \div 136$ |
| 4. $37.6 - 2.54$ | 5. $5.84(6.5)$ | 6. $7.93 \div 2.6$ |
| 7. What is the greatest common factor of 9 and 12? | 8. $\frac{2}{5} - \frac{1}{3}$ | 9. $2\frac{3}{5} + 1\frac{1}{5}$ |
| 10. Adele had 18 books. This was 3 times as many as Vera had. How many books did Vera have? | 11. Alan weighs 72.64 kg. How many pounds does Alan weigh? | 12. $62.8 - 3.54$ |

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| 1. 3.26×1.5 | 2. Find the mean of 6.8, 3.5, 9.2, 7.45, 6.05. | 3. What is the prime factorization of 24? |
| 4. $\frac{5}{9} + \frac{5}{6}$ | 5. $1\frac{4}{5} - \frac{2}{3}$ | 6. $2\frac{1}{2} \cdot 4\frac{1}{4}$ |
| 7. Write $\frac{4}{5}$ as a decimal. | 8. Write 0.25 as a percent. | 9. 75% of 48 = _____ |
| 10. What percent of 85 is 17? | 11. $6.2 + 3.8 + 0.57$ | 12. $3.216 \div 0.08$ |

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| 1. What is the prime factorization of 56? | 2. $\frac{5}{6} \cdot \frac{2}{3}$ | 3. What is the reciprocal of $\frac{7}{10}$? |
| 4. $\frac{4}{15} \div \frac{1}{3}$ | 5. Solve. $n - 6 = 15$ | 6. Solve. $y + 27 = 36$ |
| 7. Solve. $12n = 108$ | 8. Lee has some money in his wallet. He buys a book for \$13. Then he has \$28 left in his wallet. How much money did he have before he bought the book? | 9. Find each product: $\frac{2}{5}$ of 40 _____ $\frac{7}{8}$ of 48 _____ $\frac{1}{4}$ of 36 _____ |
| 10. Name the % for each fraction. $\frac{4}{5} =$ _____ $\frac{1}{4} =$ _____ | 11. Write each decimal as a percent. 0.59 = _____ 0.7 = _____ 0.418 = _____ 7.3 = _____ | 12. $5\frac{1}{4} - 4\frac{2}{3}$ |

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| 1. $\frac{7}{10} \div \frac{3}{8}$ | 2. Find the LCM of 12 and 20. | 3. Solve the proportion. $\frac{14}{n} = \frac{21}{54}$ |
| 4. 12% of what number is 42? | 5. Find the unit price if a store sells 8 bars of soap for \$2.96. | 6. Compare using < or >. 0.073 _____ 0.07 0.9 _____ 0.09 4.58 _____ 4.6 |
| 7. $(12 + 6) \div 2 \times 3 =$ | 8. $12 + 6 \div 2 \times 3$ | 9. Solve. $8n = 72$ |
| 10. Divide: $0.8 \div 0.016$ | 11. Write in order from least to greatest. 7.631; 7.64; 7.463 | 12. 45% of 20 |

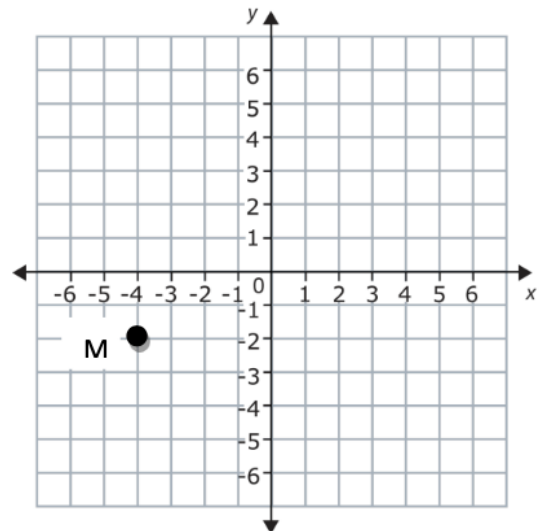
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| <p>1. Kate has $4\frac{1}{2}$ pounds of sliced turkey. She is making huge poboys that have $\frac{3}{4}$ pounds of meat on each sandwich. How many turkey poboys can be made?</p> <p>A. $5\frac{1}{4}$ B. 6 C. $3\frac{3}{4}$</p> | <p>2. Larry works 5 hours each day. How many hours does he work in 6 days?</p> <p>A. $11\frac{3}{4}$ B. $30\frac{3}{4}$ C. $34\frac{1}{2}$</p> | <p>3. Mr. Clarke buys 6 English ivy plants for \$5.95 each and 4 flower pots for \$2.75 each. How much does Mr. Clarke spend in all?</p> <p>A. \$35.70 B. \$38.50 C. \$46.70</p> |
| <p>4. Write as an improper fraction.</p> <p>$3\frac{5}{8}$</p> <p>$5\frac{9}{10}$</p> <p>$4\frac{2}{9}$</p> | <p>5. Write as a mixed number.</p> <p>$\frac{32}{3}$</p> <p>$\frac{25}{4}$</p> <p>$\frac{38}{9}$</p> | <p>Compare using $<$, $>$, or $=$.</p> <p>$\frac{7}{15}$ _____ $\frac{7}{10}$</p> <p>$\frac{7}{9}$ _____ $\frac{2}{3}$</p> |
| <p>6. Solve.</p> <p>$\frac{3}{9} = \frac{n}{36}$</p> | <p>7. Solve.</p> <p>$\frac{2}{3} = \frac{12}{n}$</p> | <p>8. Solve.</p> <p>$\frac{n}{15} = \frac{2}{5}$</p> |
| <p>9. Use an integer to describe the following situation.</p> <p>The altitude of Death Valley is 282 feet below sea level.</p> | <p>10. Use an integer to describe the following situation.</p> <p>Mount Hood is 11,239 feet above sea level</p> | <p>11. Compare using $<$, $>$, or $=$.</p> <p>-11 _____ 8</p> <p>-13 _____ -16</p> |

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| <p>1. What is the absolute value of -14?</p> | <p>2. What is the absolute value of 38?</p> | <p>3. Change each percent to a decimal.</p> <p>5% = _____</p> <p>28% = _____</p> <p>4.5% = _____</p> |
| <p>4. Find 25% of 40.</p> | <p>5. Change to a percent.</p> <p>0.47 = _____</p> <p>0.003 = _____</p> <p>1.9 = _____</p> | <p>6. Write each percent as a fraction in lowest terms.</p> <p>35% = _____</p> <p>99% = _____</p> <p>540% = _____</p> |

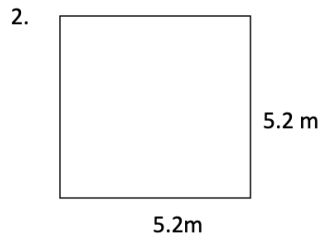
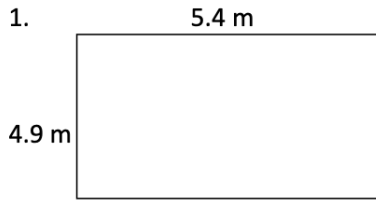
7. Graph and label the following points on the coordinate plane.

- A (3, 1) B (-2, -4)
 C (5, -2) D (-1, 6)

8. Write the ordered pair naming point M.





Using the given measurement, find the area and perimeter of each figure.



Area = _____ Perimeter = _____ Area = _____ Perimeter = _____

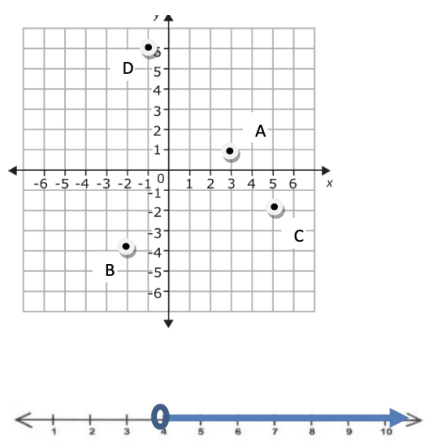
3. Greg wants to buy a kayak at Academy Sporting Goods. It is \$450. What will the total cost be if the tax rate is 9%?

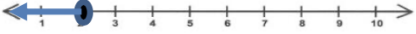
4. 42 out of the 60 seventh graders went to the beach over the summer. What percent of the seventh graders went to the beach over the summer?

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| <p>1. Write an equation for the following word sentence.</p> <p>A number y decreased by 12 is 14.</p> | <p>2. Solve. $38 = n + 12 + 5$</p> | <p>3. Solve. $a + 5.5 = 17.3$</p> |
| <p>4. Write an equation and solve.</p> <p>15 subtracted from a number w is 24.</p> | <p>5. Solve. $\frac{m}{14} = 11$</p> | <p>6. Solve. $136 = 17b$</p> |
| <p>7. $\frac{2}{3} = \frac{1}{4}k$</p> | <p>8. Is the ordered pair $(4, 22)$ a solution for $y = 7x - 4$?</p> | <p>9. List three ordered pairs that would be a solution for the equation $y = 2x + 3$.</p> |
| <p>10. Each ticket to a school dance is \$4. The total amount collected in ticket sales is \$460. Write and solve an equation to find the number of tickets sold.</p> | <p>11. Graph $a > 4$ on the number line.</p>  | <p>12. Graph $m < 2$ on the number line.</p>  |

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| <p>1. There are 20 students in the photography club. 95% of the club showed up to help out at a car wash fundraiser. How many members showed up?</p> | <p>2. Merritt found a soccer ball that originally sold for \$25. It is reduced by 30%. What is the sale price of the soccer ball?</p> | <p>3. A board that is $12\frac{1}{2}$ feet long is being cut into sections that are $\frac{1}{4}$ foot long. How many sections can be cut from the whole board?</p> |
| <p>4. Sarah bought two adult movie tickets and three children's movie tickets for a total of \$34. If each adult ticket cost \$8, then what is the cost of one children's ticket?</p> | <p>5. Irene is designing a flower bed that will have a fence surrounding it. The length of the flower bed will be three times as long as the width. a) If the width of the flower bed is eight feet, what is the perimeter of the flower bed? b) What is the area of the flower bed?</p> | <p>6. Sherri ran a mile in 6.15 minutes. Previously, her time was 6.25 minutes. By how many seconds did she improve? (There are 60 seconds in a minute)</p> |
| <p>7. You set your watch to chime every 15 minutes and your friend sets her watch to chime every 20 minutes. Both watches chime at 1:22 p.m. When is the next time that the watches will chime at the same time?</p> | <p>8. Ralph makes $2\frac{1}{2}$ batches of oatmeal cookies. Each batch makes 24 cookies. Ralph gives away $\frac{1}{4}$ of his cookies to his class at school and $\frac{2}{5}$ of his remaining cookies to his bus driver. How many cookies does Ralph have left?</p> | <p>9. Michelle owns jazz, rap and rock CD's. The ratio of jazz CD's to rap CD's is equal to the ratio of rap CD's to rock CD's. If Michelle owns 4 jazz CD's and 16 rock CD's, how many rap CD's does she own?</p> |

Answer Key

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| Page 1: 1. seven million 2. 48,000 3. 1507 4. 2044 5. 962 6. 113,460 7. $161\frac{11}{25}$ 8. \$45 9. 1200 ft 10. 4252 11. 17856 12. 19.5 feet | Page 2: 1. 15.38 2. $n = 72$ 3. 36 4. $2\frac{7}{12}$ 5. $3\frac{1}{2}$ 6. $5\frac{3}{4}$ 7. $3\frac{4}{7}$ 8. 2.3; 23; 230 9. 25; 144; 64; $\frac{1}{27}$ 10. 3706 11. 8 12. 1 | Page 3: 1. 24 2. 68 3. 46.68 4. 4.618 5. \$4.20 6. 5.369 7. 89.48 8. 34.75 9. 46 mm 10. 37 11. $8\frac{1}{12}$ 12. $5\frac{5}{8}$ | Page 4: 1. 4 2. $1\frac{25}{32}$ 3. 105 4. 35.06 5. 37.96 6. 3.05 7. 3 8. $\frac{1}{15}$ 9. 4 10. 6 books 11. 160 lb. 12. 59.26 | Page 5: 1. 4.89 2. 6.6 3. $2^3 \times 3$ 4. $1\frac{7}{18}$ 5. $1\frac{2}{15}$ 6. $10\frac{5}{8}$ 7. 0.8 8. 25% 9. 36 10. 20% 11. 10.57 12. 40.2 | |
| Page 6: 1. $2^3 \times 7$ 2. $\frac{5}{9}$ 3. $\frac{10}{7}$ 4. $\frac{4}{5}$ 5. $n = 21$ 6. $y = 9$ 7. $n = 9$ 8. \$41 9. 16; 42; 9 10. 80%; 25% 11. 59%; 70; 41.8%; 730% 12. $\frac{7}{12}$ | Page 7: 1. $1\frac{13}{15}$ 2. 60 3. 36 4. 350 5. \$0.37 or 37 6. $>$; $>$; $<$ 7. 27 8. 21 9. 9 10. 50 11. 7.463; 7.631; 7.64 12. 9 | Page 8: 1. b 2. c 3. c 4. $\frac{29}{8}$; $\frac{59}{10}$; $\frac{38}{9}$ 5. $10\frac{2}{3}$; $6\frac{1}{4}$; $4\frac{2}{9}$ 6. $<$; $>$ 7. $n = 12$ 8. $n = 18$ 9. $n = 6$ 10. -282 11. 11,239 12. $<$; $>$ | Page 9: 1. 14 2. 38 3. 0.05; 0.28; 0.045 4. 10 5. 47%; 0.3%; 190% 6. $\frac{7}{20}$; $\frac{99}{100}$; $5\frac{2}{5}$ 7. See graph below 8. (-4, -2) | Page 10: 1. $A = 26.46 \text{ m}^2$; $P = 20.6 \text{ m}$ 2. $A = 27.04 \text{ m}^2$; $P = 20.8 \text{ m}$ 3. \$490.50 4. 70% | |
| Page 11: 1. $y - 12 = 14$ 2. $n = 21$ 3. $a = 11.8$ 4. $w - 15 = 24$; $w = 39$ 5. $m = 154$ 6. $b = 8$ 7. $k = 2\frac{2}{3}$ 8. no 9. (0,3), (1, 5), (2, 7) 10. $460 = -4x$; 115 tickets | Page 12: 1. 19 students 2. \$17.50 3. 50 sections 4. \$6 5. $P = 64$ feet; $A = 192 \text{ ft}^2$ 6. 6 sec 7. 2:22 pm 8. 27 cookies 9. 8 rap CD's |  | | | |
| 11. | | | | | |

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| | | <p>12.</p>  | |
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