Summer Math Packet 2021

Dear Students,

The teachers in the math department are very excited about the upcoming school year. We look forward to working with you and helping you to become successful in your math classes.

The problems in this packet are a review of concepts that you have learned in your previous math classes. A strong knowledge of this material will help you in your future math classes.

Here are some suggestions for the summer math packet:

- Print the packet or get a printed copy from the school
- Work on one page or section a week
- Do NOT wait until the end of the summer to complete the whole packet
- Use the examples provided and watch videos online for extra help if needed
    - Khanacademy.com
    - Ixl.com
- Turn the completed packet into your teacher on the first day of school
    - When turned in on the first day of school, you will receive a homework pass from your teacher!!!!
    - This is a grade. It is not optional.

Email us if you have any questions. We will answer emails when we can over the summer.

- Mae Margaret Davis – Algebra I, Geometry, Honors Geometry, and Business Calculus (mdavis@lee-scott.org)
- Neally Lewis - Dual Enrollment Cal I, Cal II, Dual Enrollment Pre-Calculus, and Finite Math (nlewis@lee-scott.org)
- Becky Mullis – 7th Grade Math and 10th Grade Algebra 2 (bmullis@lee-scott.org)
- Michele Merrett – 7th Grade Accelerated Math, 8th Grade Math and 12th Grade Finite Math (mmerrett@lee-scott.org)
- Barrett Odom - ACT Prep Math (bodom@lee-scott.org)

Thank you and have a great summer!

LSA Math Department

Discrete Math Summer Packet

Do NOT use calculators to complete the following problems.

Translate Algebraic Expressions

1) q cubed minus the product of 5 and g plus 7 _____

2) The product of c and 6 is subtracted from two-thirds of n _____

3) One-sixth of the sum of h and 5 minus the product of 2 and z _____

4) s squared plus the product of 6 and p plus 4 _____

5) The sum of two-thirds of m, one-fourth of c, and 8 _____

Solve the Equations

1) $-32 + 8c = 7(9c - 6)$

2) $-7(8 + 9d) = 27$

3) $-8h + 6 + 3 = -19$

4) $4y + 9 - 7y = -34$

Discrete Math Summer Packet

Do NOT use calculators to complete the following problems.

Exponents with Multiplication and Division

1) $\frac{8c}{6c^4}$

2) $9y^{-4}n^4 \cdot 2yn^{-3}$

3) $4n^3k^{-6} \cdot 6n^{-3}k^2$

4) $3s^5 \cdot 4s^{-3}b^6$

5) $\frac{r^5}{r^4}$

6) $\frac{4^2}{4^{-5}}$

Order of Operations

1) $(96 - 6^2) \div (1 + 3)$

2) $6 \times (12 - 2) - 5^2$

4) $(14 - 5)^2 + (18 \div 2)$

5) $(14 - 5)^2 + (15 \div 3)$

Discrete Math Summer Packet

Do NOT use calculators to complete the following problems.

Operations with Fractions

1. $\left(-\frac{11}{19}\right) - \frac{35}{16} + \left(-\frac{1}{6}\right)$

2. $\frac{16}{19} - \frac{14}{9} + \left(-\frac{19}{12}\right)$

3. $\left(-\frac{24}{19}\right) - \left(-\frac{3}{5}\right) - \left(-\frac{3}{4}\right)$

4. $\frac{11}{14} + \left(-\frac{53}{20}\right) - \frac{7}{19}$

5. $\frac{16}{19} + \frac{1}{2} + \frac{5}{19}$

6. $\frac{31}{12} \times \frac{15}{13} \times \left(-\frac{10}{9}\right)$

7. $\left(-\frac{26}{17}\right) \times \left(-\frac{7}{10}\right) \div \frac{5}{3}$

8. $\left(-\frac{23}{12}\right) + \left(-\frac{12}{5}\right) + \frac{11}{6}$

9. $\left(-\frac{11}{10}\right) \div \left(-\frac{1}{4}\right) \times \left(-\frac{40}{19}\right)$

10. $\left(-\frac{5}{2}\right) \div \frac{13}{7} \times \frac{9}{7}$

Discrete Math Summer Packet

Do NOT use calculators to complete the following problems.

Percent Calculations

1. 74.34 is 63% of what amount?
2. What is 24% of 647?
3. What percent of 933 is 391.86?
4. What is 81% of 811?
5. What is 85% of 891?
6. What percent of 182 is 176.54?
7. What percent of 753 is 67.77?
8. 156.24 is 36% of what amount?
9. 28.2 is 10% of what amount?
10. What percent of 79 is 30.02?

Discrete Math Summer Packet

Do NOT use calculators to complete the following problems.

Rounding

Round each number to the place value underlined.

1. 30,033

2. 78,198,802

3. 54,608.08

4. 4,089.99

5. 70,987.35

6. 44,579,091.009

Calculate each product.

7,018 × 626	4,084 × 523	8,009 × 601	2,903 × 501
9,638 × 148	4,333 × 392	5,593 × 104	9,712 × 150

Discrete Math Summer Packet

Do NOT use calculators to complete the following problems.

Find each quotient to two decimal places.

$98\overline{)3289}$ $35\overline{)4907}$ $92\overline{)5228}$ $41\overline{)3403}$

Distributive Property

$2w(-6w - 1)$

$7x(-3x - 5)$

$-6(8 - 2r)$

$-3(-9 + 8r)$

$2(6v - 1)$

$2b(9b - 6)$

$7n(-8n + 2)$

$(3n + 3)6$

$-6d(4 + 5d)$

$-4p(-3p - 4)$

$-9k(-7k + 7)$

$(-4 - 4f)(-4)$

$2t(-t - 8)$

$-5(-9 - 9w)$