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
  - 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)
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Thank you and have a great summer!

LSA Math Department

7th Grade Summer Math Packet

Rounding Decimals: Round each number to the given place value.Example:

Round 2.0127 to the hundredths place. *2.01*

1. 6.32; tenths

2. 0.4721; hundredths

3. 26.444; tenths

4. 362.0846; thousandths

5. 2.96; tenths

Adding and Subtracting Decimals: Make sure you line up the decimal point.

Example: 2.45 - 0.5 = 1.95

1)
$$\begin{array}{r} 8.7 \\ + 5.4 \\ \hline \end{array}$$

2) 74.906 + .01 + 42 =

3) 8416 + .28 + 1.489 =

4)
$$\begin{array}{r} 38.64 \\ - 8.87 \\ \hline \end{array}$$

5) 462 – 31.2 =

6) 16.001 - 12.984 =

7) .1 + 1.9 + 13 =

8) 20 – 14.8 - .018 =

9) 6 + 132.89 =

10) 346.8912 – 29.98764

11)
$$\begin{array}{r} 11.00001 \\ - 1.11234 \\ \hline \end{array}$$

12)
$$\begin{array}{r} 1234. \\ - .1234 \\ \hline \end{array}$$

Multiplying Decimals: Multiply the numbers like normal. Then count the decimal places and count from the right side of your answer to put the decimal point.

1) 1.67×3.2 2) $84.78 \times .612$ 3) $98.47 \times .7$ 4)

$$
\begin{array}{r}
.8842 \\
\times\ .002 \\
\hline
\end{array}
$$

5)

$$
\begin{array}{r}
5.76 \\
\times\ .25 \\
\hline
\end{array}
$$

6)

$$
\begin{array}{r}
8.04 \\
\times .004 \\
\hline
\end{array}
$$

7)

$$
\begin{array}{r}
8.45 \\
\times\ .36 \\
\hline
\end{array}
$$

8)

$$
\begin{array}{r}
4.095 \\
\times\ .006 \\
\hline
\end{array}
$$

9)

$$
\begin{array}{r}
11.4 \\
\times\ 18 \\
\hline
\end{array}
$$

10)

$$
\begin{array}{r}
36 \\
\times\ 1.1 \\
\hline
\end{array}
$$

Dividing Decimals: To divide by a decimal number, make the divisor a whole number by moving the decimal. Then, move the decimal in the dividend the same number of times you moved it in the divisor.

1) $.3\overline{)69}$

2) $.82\overline{)16.4}$

3) $.002\overline{)4}$

4) $1.4\overline{)280}$

5) $25\overline{)4}$

6) $37\overline{)1.68}$

7) $.66\overline{)15.18}$

8) $1.87\overline{)3.96}$

9) $329\overline{)2.303}$

10) $.64\overline{)14208}$

11) $20\overline{)1}$

12) $.3\overline{)85}$

Adding and Subtracting Fractions: You MUST have a common denominator.

1) $\dfrac{3}{4} + \dfrac{2}{5}$

2) $1 + \dfrac{9}{5}$

3) $\dfrac{13}{7} + \dfrac{3}{2}$

4) $\dfrac{5}{8} - \dfrac{1}{7}$

5) $1 + \dfrac{3}{7}$

6) $\dfrac{1}{7} + \dfrac{3}{2}$

7) $\dfrac{4}{5} + \dfrac{9}{7}$

8) $\dfrac{5}{4} + \dfrac{1}{2}$

9) $\dfrac{7}{4} + \dfrac{5}{8}$

10) $7 - \dfrac{1}{4}$

11) $\dfrac{3}{2} + \dfrac{4}{3}$

12) $3 - \dfrac{3}{7}$

Multiplying Fractions: Change all mixed numbers to improperfractions. Then multiply straight across. Numerator times numerator and denominator times denominator.

1. $\frac{14}{19} \times \frac{5}{17} =$ _____   2. $\frac{7}{8} \times \frac{5}{7} =$ _____   3. $\frac{12}{16} \times \frac{8}{20} =$ _____   4. $\frac{3}{5} \times \frac{3}{4} =$ _____

5. $\frac{4}{10} \times \frac{10}{12} =$ _____   6. $\frac{1}{3} \times \frac{1}{19} =$ _____   7. $\frac{5}{6} \times \frac{12}{14} =$ _____   8. $\frac{4}{13} \times \frac{2}{16} =$ _____

9. $\frac{1}{2} \times \frac{1}{9} =$ _____   10. $\frac{6}{20} \times \frac{4}{7} =$ _____   11. $\frac{3}{11} \times \frac{13}{15} =$ _____   12. $\frac{2}{7} \times \frac{4}{16} =$ _____

Dividing Fractions: Change all mixed numbers to improper fractions.Then multiply by the reciprocal. (KEEP CHANGE FLIP)

1. $\frac{2}{3} \div \frac{1}{9} =$ _____   2. $\frac{1}{2} \div \frac{2}{3} =$ _____   3. $\frac{1}{2} \div \frac{1}{2} =$ _____
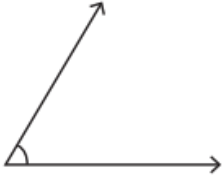
4. $\frac{1}{7} \div \frac{1}{3} =$ _____   5. $\frac{2}{6} \div \frac{6}{9} =$ _____   6. $\frac{6}{7} \div \frac{2}{4} =$ _____

7. $\frac{6}{8} \div \frac{2}{4} =$ _____   8. $\frac{1}{3} \div \frac{2}{9} =$ _____   9. $\frac{1}{5} \div \frac{1}{2} =$ _____
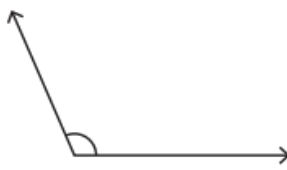
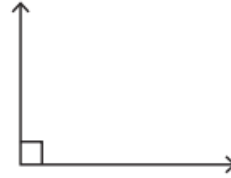# Geometry:

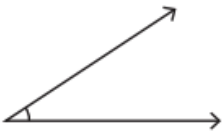Classify each angle as right, acute, or obtuse.
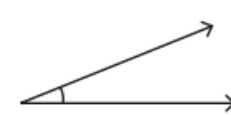
1)

Type:_____

2)

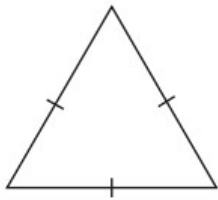Type:_____

3)

Type:_____

4)

Type:_____

5)

Type:_____

6)

Type:_____

Classify each triangle as scalene, isosceles, or equilateral.

1)

Equilateral triangle

2)

_____
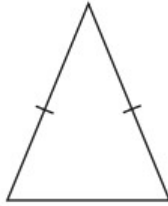
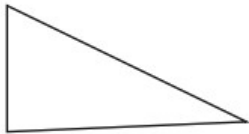3)

_____

4)

_____

5)

_____
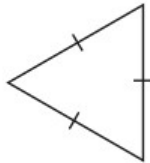
6)

_____

Order of Operations:
Parenthesis
Exponents
Multiply or Divide
Add or Subtract

1) 9 x 12 ÷ 4 - 1

6) 20 ÷ 10 x 18 - 9

2) 16 ÷ 4 x 13 + 9

7) 18 ÷ 3 x 7 + 14

3) 16 - 6 + 8 ÷ 2

8) 24 ÷ 12 x 5 + 8

4) 16 ÷ 2 x 6 - 2

9) 10 ÷ 2 x 11 + 15

5) 19 + 6 x 20 ÷ 5

10) 19 - 19 x 9 + 16

One Step Equations: Solve each equation for the unknown variable.

1) $10 = z + 6$

2) $8y = 48$

3) $q - 12 = 1$

4) $18 = \dfrac{a}{2}$

5) $\dfrac{r}{3} = 7$

6) $11 = m - 4$

7) $t - 19 = 2$

8) $1 + s = 3$

Percents-Decimals-FractionsComplete
the table below.

fraction	decimal	percent
$\frac{15}{100}$	.15	
$\frac{73}{100}$		73%
		39%
$\frac{4}{100}$		
	.77	
		46%
$\frac{50}{100}$		
	.06	

Exponents: Multiply the base by itself the number of timesindicated by the exponent.

1. $3^3 =$

2. $5^4 =$

3. $7^3 =$

4. $(-4)^3 =$

5. $(-8)^4 =$

6. $(-6)^3 =$

Conversions

Convert the following measurements.

1) 23 ft = _____ in	2) 546 in = _____ ft
3) 216 in = _____ ft	4) 34 ft = _____ in
5) $57\frac{1}{2}$ ft = _____ in	6) 516 in = _____ ft

1)   158 cups = _____ pints   2)   49 pints = _____ cups

3)   13 pints = _____ cups   4)   36 cups = _____ pints

5)   74 cups = _____ pints   6)   225 pints = _____ cups

7)   140 pints = _____ cups   8)   362 cups = _____ pints

1) 12.7 cm = _____ mm	2) 54.54 mm = _____ cm
3) 710 mm = _____ cm	4) 94.2 cm = _____ mm