

SUMO/STEM Competition – Study Sheet

Math 3rd Grade

First Name _____

Last Name _____

School _____

1)
$$\begin{array}{r} 97 \\ 93 \\ 79 \\ + 84 \\ \hline \end{array}$$

2)
$$\begin{array}{r} 709 \\ \hline \times 2 \end{array}$$

1. _____

2. _____

3. _____

3)
$$\begin{array}{r} 32 \\ \hline \times 2 \end{array}$$

4)
$$6 \overline{)36}$$

4. _____

5. _____

5)
$$2 \overline{)36}$$

6)
$$\begin{array}{r} 250 \\ \hline - 77 \end{array}$$

6. _____

7. _____

7)
$$3 \overline{)137}$$

8)
$$\begin{array}{r} 4424 \\ \hline \times 3 \end{array}$$

8. _____

9. _____

10) 2 days = _____ hours

SUMO/STEM Competition – Study Sheet

Math 4th Grade

First Name _____

Last Name _____

School _____

1)
$$\begin{array}{r} 992 \\ 786 \\ + 352 \\ \hline \end{array}$$

2)
$$\begin{array}{r} 6153 \\ - 6142 \\ \hline \end{array}$$

1. _____

2. _____

3)
$$81 \overline{)891}$$

4) $24 \text{ cm} + 9 \text{ cm} = \underline{\hspace{1cm}} \text{ cm}$

3. _____

4. _____

5)
$$\begin{array}{r} 32.51 \\ - 14.40 \\ \hline \end{array}$$

6)
$$\begin{array}{r} 61\frac{3}{8} \\ + 29\frac{2}{8} \\ \hline \end{array}$$

5. _____

6. _____

7) $\frac{1}{5}$ of 100

8)
$$\begin{array}{r} 83 \\ \times 54 \\ \hline \end{array}$$

7. _____

8. _____

9)
$$\begin{array}{r} \frac{2}{7} \\ \frac{1}{7} \\ \frac{1}{7} \\ \frac{3}{7} \\ + \frac{3}{7} \\ \hline \end{array}$$

10)
$$\begin{array}{r} 365 \\ \times 3 \\ \hline \end{array}$$

9. _____

10. _____

SUMO/STEM Competition – Study Sheet

Math 5th Grade

First Name _____

Last Name _____

School _____

1)
$$\begin{array}{r} 896.52 \\ 729.99 \\ + 87.85 \\ \hline \end{array}$$

2)
$$\begin{array}{r} 456 \\ \times 44 \\ \hline \end{array}$$

1. _____

3) Reduce
$$\frac{90}{100} =$$

4) Solve
$$3 \text{ hrs.} = \underline{\hspace{1cm}} \text{ days}$$

2. _____

3. _____

5) $n - 15 = 3 \times 4$ $n =$

6) $16 \overline{)52,736}$

4. _____

7) $5\frac{1}{7} \times 3\frac{1}{2} =$

8) $n + 3 = 6 \times 5$

5. _____

6. _____

9)
$$\begin{array}{r} 12\frac{1}{2} \\ + 39\frac{1}{3} \\ + 50\frac{1}{6} \\ \hline \end{array}$$

10) Change to improper

$$\begin{array}{r} \frac{1}{2} \\ + \frac{1}{3} \\ + \frac{1}{9} \\ \hline \end{array}$$

7. _____

8. _____

9. _____

10. _____

SUMO/STEM Competition – Study Sheet

Math 6th Grade

First Name _____

Last Name _____

School _____

1)
$$\begin{array}{r} .127 \\ \times 3.06 \\ \hline \end{array}$$

2) 2 hrs. = ___ mins

1. _____

2. _____

3)
$$\frac{2816}{4} =$$

4) Convert
MMXXII

3. _____

5)
$$\begin{array}{r} 1.8000 \\ - .9632 \\ \hline \end{array}$$

4. _____

5. _____

6. _____

Write the decimal equivalent

6) $\frac{1}{3} =$

7) $\frac{1}{8} =$

8) $\frac{4}{5} =$

7. _____

8. _____

9) $4\frac{2}{8} \times \frac{5}{11} =$

10) Solve $2^7 =$

9. _____

10. _____

SUMO/STEM Competition – Study Sheet Math 7th Grade

First Name _____

Last Name _____

School _____

Order of operations

1) $4 - 4 \times 2 - 1 =$ **2)** $2 \times 2 - 2 \div 2 \times 2 =$ 1. _____

Change these decimals to %

3) .075 **4)** .0005 **5)** 99.80 2. _____

6) .17 3. _____

Find the LCD 4. _____

7) $\frac{1}{6}, \frac{3}{10}$ 5. _____

Change the percentage to decimal 6. _____

8) 30% 7. _____

9) What percentage of 60 is 30?
(round to nearest tenth) 8. _____

10) You have \$40 and you spent 50% of $\frac{1}{2}$ of the
\$40. How much do you have left 9. _____

SUMO/STEM Competition – Study Sheet

Math 8th Grade

First Name _____

Last Name _____

School _____

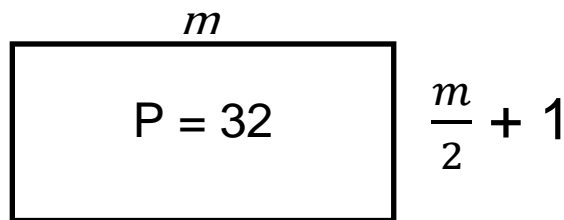
Order of operations

1) $4 \times (3^2 - 5) \div 8 =$ 2) $6 \div 3 \times 2 (9 - 3^2) + 13 =$ 1. _____

Solve

3) $4x - 6 = 7x + 30$ 4) $\frac{7}{8} \div \frac{-1}{3} =$ 2. _____

5) Find the length and width of the rectangles. 3. _____

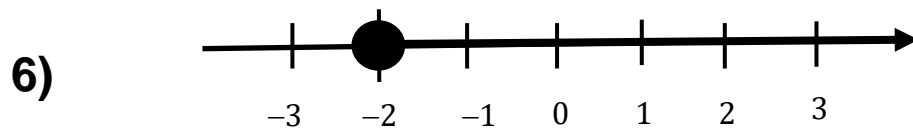


4. _____

9. L = _____

W = _____

Write the inequality



6. _____

First Name _____

Last Name _____

Write each decimal as a fraction

7) $-(-0.13)$ 7. _____

Solve

8) Teens average 9 hours of sleep each day. 8. _____
9. _____

What fraction of a week is that?

10. _____

9) $\frac{2}{3} = \frac{1}{9} + x$ Solve for x

10) $0 - .6 = 2y$ Solve for y

SUMO/STEM Competition – Study Sheet

Math 9th Grade

First Name _____

Last Name _____

School _____

1) Factor $6y + 16$ 2) What is the % decrease? $4,000 \rightarrow 600$

2) What value of v is a solution? $4(10 + v) = 36$

1. _____

3) Does $y = 9$ or $y = 6$ make this true? $y > 6$

2. _____

4) Write 7.476×10^{-4} in standard form.

3. _____

5) Factor $d^2 - 10d + 24$

4. _____

6) Solve $\frac{2^2 + 4^2 + 3^2 + 1}{2^2} =$

5. _____

6. _____

7) Solve $\frac{4^{-2}}{2^{-2}} =$

7. _____

8. _____

8) What is the slope of this line?

$$y = \frac{13}{16}x - \frac{13}{16}$$

SUMO/STEM Competition – Study Sheet

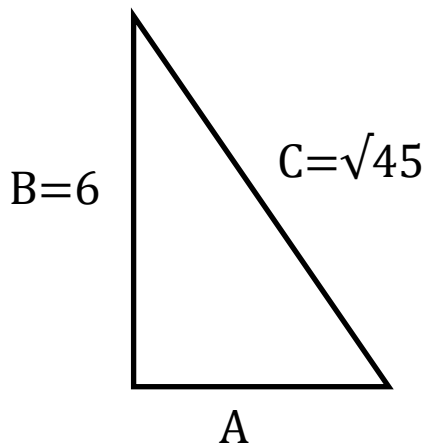
Math 9th Grade

First Name _____

Last Name _____

School _____

9) Find side A

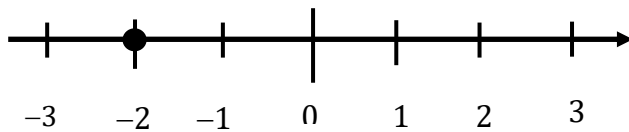


9. _____

10. _____

11. _____

10) Write the inequality for the line graph.



SUMO/STEM Competition – Study Sheet

Math 10th Grade

First Name _____

Last Name _____

School _____

1) Solve $-4x - 5x < 18$ 1. _____

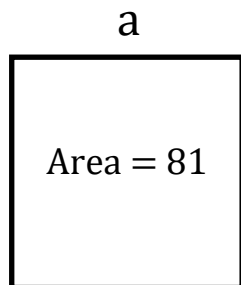
2) Simplify 2. _____
 $(2x^3 - x^2) - (3x^3 - 2x^2) =$

3) Evaluate $f(x) = 10 \cdot 2^x$ at $x = -4$ 3. _____

4) $\sqrt{x} - 8, x = \sqrt{-x + 2}$ Solve for x 4. _____

5) What % of 60 is 40? 5. _____

6) Find the side of the square 6. _____



SUMO/STEM Competition – Study Sheet

Math 10th Grade

First Name _____

Last Name _____

School _____

7) Which is larger?

a) $\frac{1}{4}$

b) $\frac{6}{20}$

c) .26

7. _____

8) Solve $\frac{y}{5+1} = \frac{10}{3}$

8. _____

9. _____

9) Factor $x^2 + 4x + 4$

10. _____

10) How much will a \$150 coat cost if it is discounted 30%?

SUMO/STEM Competition – Study Sheet

Math 11th Grade

First Name _____

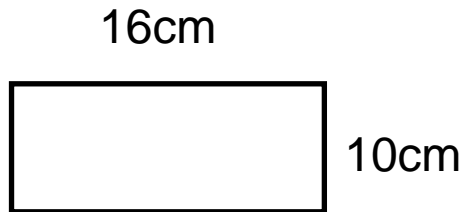
Last Name _____

School _____

1) Simplify $(2x^3 - x^2) - (3x^3 - 2x^2)$

2) Solve $-25x^2, x = -5$

3) Find the area



1. _____

2. _____

3. _____

4) Solve $\frac{5}{2} = \frac{n}{6}$ 5) Factor $x^2 - 16$

4. _____

5) I have \$20. If I buy a \$5 CD at a 20% discount, how much will I have left?

5. _____

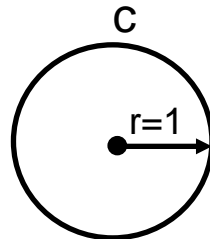
6) Solve for x, $2x - 3x = -18$

6. _____

7) $2 + (4 + 3) \times (2 + 5)$

7. _____

8) Find C when $r = 1$



8. _____

9) $\frac{\frac{-1}{2}}{\frac{1}{-6}} =$

9. _____

SUMO/STEM Competition – Study Sheet

Math 12th Grade

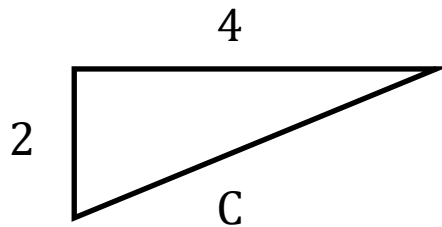
First Name _____

Last Name _____

School _____

1) $(x+2)^2 = x(x-2)$, $x =$ 2) $\frac{1}{3} \div \frac{-2}{6} =$

3) Find C

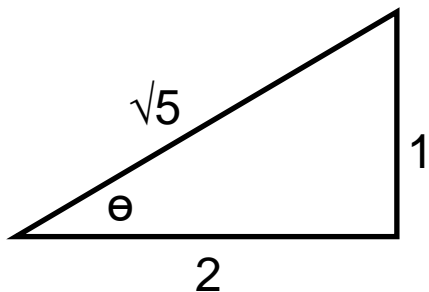


1. _____

2. _____

3. _____

4)



$\tan \theta =$

4. _____

5. _____

5) Find x, $2x + y = 4$

$$-2x + 2y = 5$$

6. _____

6) Find y from problem 5.

SUMO/STEM Competition – Study Sheet

Math 12th Grade

First Name _____

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7) Find the y – intercept

$$x = \frac{y + z}{\frac{1}{2}}$$

7. _____

8. _____

8) Which is smaller

a) $\frac{1}{5}$ b) $\frac{6}{25}$ c) $\frac{9}{50}$

9. _____

9) Graph this inequality

$$x \geq -2$$

10. _____

10) $\frac{1}{50} \div -\frac{1}{25} =$