Grades 7 & 8

Required Religion Book:

The Prayer of Jabez for Teens by Bruce Wilkinson

Students, please purchase and read the following books. Please be sure to keep the book, you will need it. A project related to summer reading will be assigned the first week of school.

Required Language Arts/Literature Book:

Grades 7 Required Reading

Soontornvat, Christina - All Thirteen: The Incredible Cave Rescue of the Thai Boys' Soccer Team

Grades 8 Required Reading

J.R.R. Tolkien - The Hobbit

Required Literature Books (To be read in class)

Grade 7: *Paolini, Christopher - Eragon*

Grade 8: *Marcus, Zukas - The Book Thief*

We will use the above books during the semester and do in depth novel study. **Please keep the book, you will need it.**

Grade 8 Supply List

For classroom:

4 boxes of tissues
3 packages of sanitizing wipes
4 rolls of paper towels
1 small bottle of hand sanitizer
1 Package of plastic utensils

For students:

1 (3 ring) binder w/ loose leaf paper
1 12” ruler
4 composition notebooks
6 pocket folders (red, blue, green, black, yellow and purple)
6 jumbo stretchy book covers (red, blue, green, black, yellow and purple)
6 packages of index cards 100/pk
1 Index file box for storage of cards
1 Pencil case - pouches preferred
2 Dozen Dixon Ticonderoga #2 Pencils
2 Black Sharpie Ultra Fine
3 Black Ballpoint Pens
3 Red Ballpoint Pens
3 Blue Ballpoint Pens
2 Erasers (large)
1 Elmer’s Glue 4oz
1 scissors 7”
1 Crayola 12 Count Washable Markers, Wide Tip
1 Crayola 12 Count Washable Markers, Fine Tip
1 Crayola 12 Count colored pencils
1 Crayola 24 Box crayons
1 package whiteboard markers (5)
1 package highlighters
1 Elmer’s School Glue stick
2 packages of loose leaf paper
1 five-subject notebook (200 pages) with tab dividers
1 Pair wired earbuds with standard 2.5mm plug for use with Chromebooks (kept at school)

Other supplies needed

Bible - *St. Joseph N.C.V. New Testament Vest Pocket Edition Youth Catechism of Catholic Church (new students only)*
Rosary Beads

At home:

1 Package of filler paper and printer paper
Ruler and protractor
Working printer with ink

8TH GRADE SUMMER

MATH PACKET

Write the divisibility rule for each number: 1

1. A number is divisible by 2 if it is an _____.

2. A number is divisible by 3 if _____.

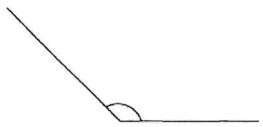
3. A number is divisible by 4 if _____.

4. A number is divisible by 5 if _____.

5. A number is divisible by 6 if _____.

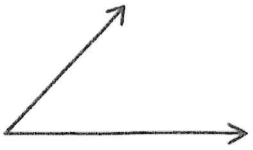
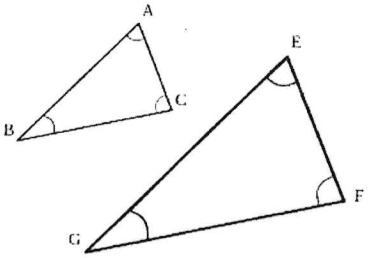
6. A number is divisible by 9 if _____.

7. A number is divisible by 10 if _____.

Use rounding to estimate the decimal sum. $\begin{array}{r} 4.324 \\ 17.649 \\ +\ 8.534 \\ \hline \end{array}$	Divide. $2.54 \div 62 =$	Find GCF of these numbers. 14, 42
Add or subtract. $\frac{2}{3} + \frac{7}{9} + \frac{5}{6} =$	Find the quotient. $0.08\overline{)32}$	Multiply. $2\frac{2}{3} \cdot 1\frac{4}{9} =$
Write the percent as a fraction in simplest form. $37\frac{1}{2}\%$	Rename the fraction as a mixed number. $\frac{35}{6}$	Multiply. Show work. $\begin{array}{r} 125 \\ \times\ 8.8 \\ \hline \end{array}$
Compute. $24 - 3 \times 5 \div (-5) + 2^2$	Write acute, right, obtuse or straight to classify the angles. 	Write the percent as a decimal. 64.7%
Multiply. Show work. $\begin{array}{r} 0.103 \\ \times\ 0.04 \\ \hline \end{array}$	Simplify. $\frac{14 + (-6)}{-8 - (-4)}$	Divide. $2\frac{2}{3} \div 1\frac{4}{9} =$

Add or subtract. Show your work: 2

1. -7 + -5 =
2. -2 - 12 =
3. -6 + 4 =
4. 12 - -7 =
5. 12 + -34 =
6. -71 - 21 =
7. 9 + 4 =
8. 12 - -9 =
9. 123 + -123 =
10. 9 - 56 =
11. -21 + 55 =
12. 76 - -21 =
13. 70 + -35 =
14. -8 - 42 =
15. -6 + 14 =
16. 9 - 23 =
17. 23 + 23 =
18. 24 - 98 =
19. 89 + 29 =
20. 65 - -2 =
21. 18 + -54 =
22. 34 - 32 =
23. -21 + 76 =
24. 142 - -98 =
25. 7 + -23 =
26. 82 - 12 =
27. 13 + -2 =

Use <, =, > to compare decimals. 0.0456 ____ 0.0765	Add or subtract. $\frac{13}{15} + \frac{5}{5} - \frac{4}{3} =$	Rename the mixed number as a fraction. $6\frac{1}{6}$
Find the quotient. $0.09\overline{)8.10}$	Simplify. $\frac{(2+3)-(5+6)}{7+(-5)}$	Divide. $0.00068 \div 0.02 =$
Rename the fraction as a mixed number. $\frac{92}{17}$	Find GCF of these numbers. 9, 81, 144	Write the percent as a fraction in simplest form. $50\frac{4}{9}\%$
Multiply. Show work. 122 x 2.22	Multiply. $\frac{8}{9} \cdot 2\frac{1}{4} =$	Compute. $[52 - (2 + 5)(-2^3)]$
Write acute, right, obtuse or straight to classify the angles. 	Are these similar or not similar? 	Multiply. Show work. 4.007 x 0.012

Name the Property: 3

1. $2.03 + 0.16 = 0.16 + 2.03$

   _____

2. $(1.7 + 1.1) + 0.3 = 1.7 + (1.1 + 0.3)$

   _____

3. $6.11 + 0 =$

   _____

4. $0.8 \times 1 =$

   _____

5. 1.24×0

   _____

6. $0.7(0.4 + 1.3) =$

   _____

7. If $A = B$ then $A + x = B + x$

   _____

8. $-8 + 8 = 0$

   _____

9. $8 \times (7 \times 6) = (8 \times 7) \times 6$

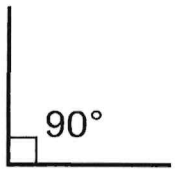
   _____

10. If $A = B$ then $A \cdot C = B \cdot C$

    _____

Some of the properties of real numbers word bank.

1. distributive property
2. commutative property of addition
3. commutative property of multiplication
4. associative property of addition
5. associative property of multiplication
6. additive identity property
7. multiplicative identity property
8. additive inverse property
9. multiplicative inverse property
10. zero property of multiplication
11. closure property of addition
12. closure property of multiplication
13. addition property of equality

Find GCF of these numbers. 12, 24, 96, 120	Add or subtract. $\frac{13}{14} - \frac{3}{7} + \frac{1}{2} =$	Find the quotient. $6.25\overline{)5.50000}$
Write acute, right, obtuse or straight to classify the angles.  	Multiply. Show work. 423 x 18.5	Rename the mixed number as a fraction. $14\frac{2}{3}$
Divide. 1.834 ÷ 32 =	Simplify. $\frac{21 \div (8-1)}{6-3}$	Write the percent as a decimal. 55.213%
Multiply. $\frac{1}{7} \cdot 1\frac{12}{14} =$	Write the fractions as a percent. $\frac{5}{12}$	Use <, =, > to compare decimals. 0.00061 ____ 0.019
Compute. $-30 + 22 \times 3 \div 6 + 4^2$	Rename the fraction as a mixed number. $\frac{11}{5}$	Multiply. Show work. 0.009 x 3.6

Multiply or Divide. Show your work: 4

28. $7 \cdot -3 =$

29. $6 \cdot 12 =$

30. $-12 \cdot -4 =$

31. $-12 \cdot 12 =$

32. $125 \div -5 =$

33. $-48 \div -21 =$

34. $-132 \div 4 =$

35. $128 \div -2 =$

36. $81 \cdot 9 =$

37. $-12 \cdot 4 =$

38. $-3 \cdot -55 =$

39. $-6 \cdot -9 =$

40. $70 \div 5 =$

41. $-420 \div 42 =$

42. $0 \div -14 =$

43. $234 \div 6 =$

44. $23 \cdot -2 =$

45. $-3 \cdot -98 =$

46. $3 \cdot 29 =$

47. $-5 \cdot -19 =$

48. $14 \cdot -7 =$

49. $-171 \div -3 =$

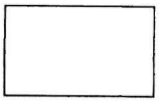
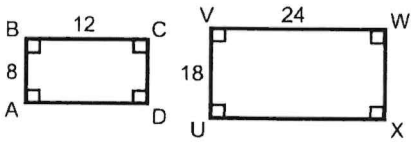
50. $-21 \div -7 =$

51. $142 \cdot -5 =$

52. $7 \cdot 13 =$

53. $-132 \div 12 =$

54. $-13 \cdot -4 =$

What are the factors? 18	Identify this shape. 	Divide. $0.015 \div 3 =$
Find the quotient. $1.2 \overline{)3.072}$	Find LCM of these numbers. 6, 12, 24	Divide. $12\frac{2}{3} \div 6\frac{1}{4} =$
Rename the mixed number as a fraction. $8\frac{2}{9}$	Are these similar or not similar? 	Multiply. Show work. 1.45 x 8
Compute. $(14 + 6) \div 5 + 9 \cdot (-11 + 6)$	Add or subtract. $\frac{5}{8} + \frac{9}{12} + \frac{2}{3} =$	Simplify. $\frac{[16 + (4 \cdot 6) \div 5}{2(21 - 19)}$
Rename the fraction as a mixed number. $\frac{29}{4}$	Multiply. Show work. 0.99 x 0.006	Write the fraction as a percent. $\frac{21}{28}$

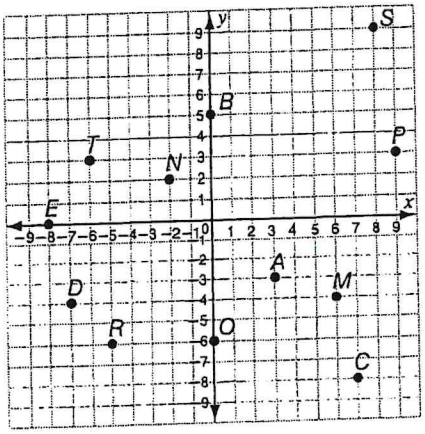
multiplication : 5

Directions: Fill in the missing numbers.

X	1	2	3	4	5	6	7	8	9	10	11	12
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

Divide. $5.035 \div 50 =$	Rename the mixed number as a fraction. $13\frac{5}{7}$	Find LCM of these numbers. 4, 9, 12, 18
Multiply. Show work. $\begin{array}{r} 5.06 \\ \times\ 2.04 \\ \hline \end{array}$	Are these shapes congruent? 	Add or subtract. $\frac{17}{22} - \frac{3}{4} + \frac{9}{11} =$
Divide. $1\frac{1}{12} \div \frac{4}{5} =$	Compute. $28 - 4 \times 4 \div 8 + (-2^3)$	Write the fraction as a percent. $\frac{6}{15}$
Simplify. $\frac{2^3 - (5-1)}{7 + (-3)}$	What are the factors? 895	Write the percent as a decimal. 9.6%
Find the quotient. $0.7\overline{)3.57}$	Rename the fraction as a mixed number. $\frac{55}{11}$	Multiply. Show work. $\begin{array}{r} 0.008 \\ \times\ 0.06 \\ \hline \end{array}$

The Coordinate Plane : 6



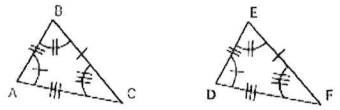
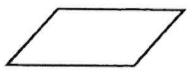
Remember:
A coordinate plane is formed by the *coordinate axes*, where the horizontal line is the *x*-axis and the vertical line is the *y*-axis.
Axes divide the coordinate plane into four sections, called *quadrants*, numbered counterclockwise from the upper right, starting with Quadrant I and ending with Quadrant IV.
An *ordered pair* (*x*, *y*) locates a point on a coordinate plane.

Find the coordinates for each point. Write the ordered pair.

1. *A* _____
2. *E* _____
3. *N* _____
4. *R* _____
5. *D* _____
6. *S* _____
7. *C* _____
8. *T* _____
9. *B* _____
10. *P* _____
11. *M* _____
12. *O* _____

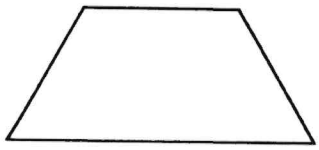
Locate the coordinates for each ordered pair on the grid above, and label the point. Write the quadrant each lies within.

13. *F* (2, 1)
14. *J* (−5, 9)
15. *Q* (−1, 6)
16. *V* (5, −4)
17. *G* (−9, −1) _____
18. *H* (−9, −8) _____
19. *W* (8, 5) _____
20. *Z* (2, −9) _____
21. *K* (−3, 6) _____
22. *L* (2, −5) _____
23. *U* (5, 2) _____
24. *Y* (−3, −2) _____

Rename the fraction as a mixed number. $\frac{123}{8}$	Find the quotient. $0.25\overline{)0.875}$	Divide. $0.0228 \div 2.4 =$
Compute. $(11 - 4) \cdot 6 - 2 \cdot (-7 + 2)$	Write the decimal as a percent. 1.24	Rename the mixed number as a fraction. $1\frac{9}{16}$
Use <, =, > to compare decimals. 6.230 ____ 6.23	Write percent as a fraction or mixed number in simplest form. $132\frac{3}{4}\%$	Are these shapes congruent?  $\Delta ABC \cong \Delta DEF$
Divide. $\frac{8}{13} \div \frac{42}{39} =$	Simplify. $\frac{[56 - (-4 \cdot -6) \div (-8)}{4^2 + (-22 + 15)}$	Add or subtract. $\frac{1}{3} - \frac{7}{10} + \frac{11}{15} =$
Multiply. Show work. 0.0001 x 0.07	Identify this shape. 	Multiply. Show work. 0.25 x 45

multiplication : 7

X	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															

Write the decimal as a percent. 68.38	Find LCM of these numbers. 6, 8, 9, 12	Multiply. $\frac{8}{12} \cdot \frac{3}{1} =$
Find the quotient. $0.08 \overline{)\$32.00}$	Identify this shape. 	Divide. $0.0049 \div 7 =$
Rename the mixed number as a fraction. $9\frac{3}{5}$	Rename the fraction as a mixed number. $\frac{199}{15}$	Use rounding to estimate the decimal sum. 0.394 13.348 + 5.439
Multiply. Show work. 8.2 x 5	Add or subtract. $\frac{9}{13} - \frac{1}{2} + \frac{2}{13} =$	Compute. $[21 + (4 \times 3)] \div 3$
Divide. $\frac{4}{5} \div 4 =$	Simplify. $\frac{(53) + (-9)}{-14 + (25)}$	Multiply. Show work. 0.087 x 0.023

Volume and Surface Area : 8

Find the volume of each figure. Use 3.14 for π.

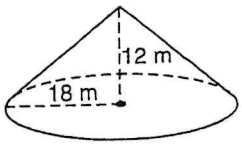
1. a cube
$e = 6$ in.

a cone
$h = 20$ in., $d = 16$ in.

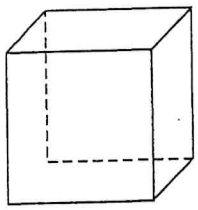
3. a cylinder
$h = 8$ cm
$d = 15$ cm

4. rectangular prism
$h = 12$ in., $w = 16$ in.
$\ell = 18$ in.

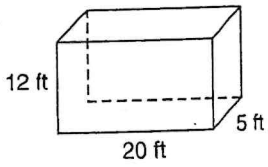
5. triangular prism
Triangle $h = 2$ yd,
$b = 5$ yd, $h = 15$ yd



7.



8.



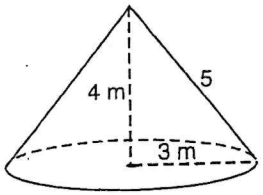
Remember:
Volume is the space a figure occupies.
Volume of a Prism: $V = \ell wh$
Volume of a Cylinder: $V = bh$ or $V = \pi r^2 h$
Lateral area is the area of all surfaces of a figure except the base(s). $LA = Ph$
Surface area of a three-dimensional figure is the sum of the areas of all its surfaces
$S = 2(\ell w + \ell h + wh)$
Lateral and Surface Areas of a Cylinder:
$LA = 2\pi rh$ or πdh
$S = LA + 2B$, where LA is lateral area, r is the radius of the base, d is the diameter of the base, h is the height of the cylinder, S is the surface area, and B is the area of the base.

Find the lateral area and surface area of each figure. Round to the nearest hundredth.

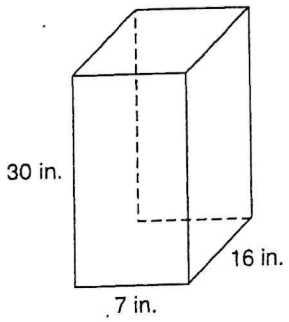
9. a cylinder
$h = 18$ ft
$d = 25$ ft

10. rectangular prism
$h = 6$ m, $w = 1.6$ m
$\ell = 8$ m

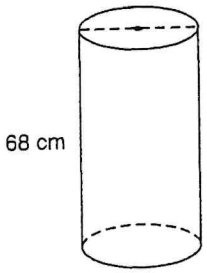
11. triangular prism
$h = 8$ ft, $s_1 = 5$ ft
$s_2 = 5$ ft, $b = s_3 = 6$



13.



14. $d = 1.5$ cm



Multiply. Show work. $\begin{array}{r} 2.5 \\ \times\ 2.5 \\ \hline \end{array}$	Rename the fraction as a mixed number. $\frac{809}{13}$	Write the decimal as a percent. 0.54
Find the quotient. $2.2\overline{)27.28}$	Subtract. $13\frac{9}{12} - 11\frac{3}{4} =$	Divide. $0.062 \div 32 =$
Multiply. Show work. $\begin{array}{r} 1.093 \\ \times\ 0.04 \\ \hline \end{array}$	Divide. $\frac{15}{17} \div 5 =$	What are the factors? 246
Subtract. $2\frac{2}{3} - 1\frac{4}{9} =$	Compute. $24 - 3 \times 5 \div (-5) + 2^2$	Write the fraction as a percent. $\frac{3}{4}$
Rename the mixed number as a fraction. $5\frac{2}{7}$	Write the decimal as a percent. 0.12123	Simplify. $\frac{2 \cdot 7 - [(16 \div 8) + 2]}{5(9 - 2^3)}$