

Trinity Catholic Academy

Grade 6 Summer Math Packet

Congratulations new 6th graders!

Name: _____

Directions: Complete the following problems to keep your math skills sharp over the summer. Refer to the resources given within this assignment for help. Use PENCIL ONLY and show necessary work. Please complete all problems in a notebook labeled Summer Math Grade 6. You may use your graph paper composition notebook for your summer math if you wish.

REFLEX: As you enter middle school, it is important to know your math facts quickly and easily. Learning and remembering these facts will help you spend more time focusing on new math skills and concepts.

Your **graded** summer Reflex assignment includes logging into and completing **two** Reflex assignments per week. Upon accomplishing 90% fluency in your facts, you will be excused from Reflex for the remainder of your summer vacation 😊 (You are welcome to do Reflex as many times per week as you wish!) Your login information will remain the same as it was during the year. **GOOD LUCK, YOU GOT THIS!!!**

Section 1: Place Value & Rounding (1-10)

1. Write 45,876 in expanded form.
2. Write $30,000 + 800 + 20 + 7$ in standard form.
3. Round 4,286 to the nearest ten.
4. Round 4,286 to the nearest hundred.
5. Round 8,941 to the nearest thousand.
6. What is the value of the 7 in 27,435?
7. Compare: 5,608 ____ 5,680 (< or >)
8. Compare: 12,345 ____ 12,354 (< or >)
9. Order from least to greatest: 4,231, 4,123, 4,312.
10. Write the number word for 18,209.

Section 1 resources:

<https://youtu.be/qEHqVRJ7D2I?si=abPg4o-Oehu8tFgh> (expanded form explained)

<https://youtu.be/T5Qf0qSSJFI?si=6F0itIFBhbqqvCzN> (place value explained)

<https://youtu.be/fd-E18EqSVk?si=i0-FtDbcifGvy0N5> (understanding rounding numbers)

<https://youtu.be/TOrUx0wDDQ?si=P9GSRenU9NBiRtBa> (ordering numbers)

Place Value Reference Chart

1,000,000		100,000	10,000	1,000		100	10	1		0.1	0.01	0.001
	,				,				.			
Millions		Hundred Thousands	Ten Thousands	Thousands		Hundreds	Tens	Ones	Decimals ↓	Tenths	Hundredths	Thousandths

Section 2: Addition & Subtraction (11-20)

Please show your work

11. $4,578 + 2,936$
12. $8,201 + 1,999$
13. $9,450 - 3,286$
14. $10,000 - 4,875$
15. $2,839 + 6,172$
16. $7,502 - 2,948$
17. $3,445 + 5,228$
18. $8,001 - 4,999$
19. $9,327 + 1,468$
20. $12,500 - 6,749$

Section 3: Multiplication (21-30)

Please show your work

21. 36×7
22. 48×6
23. 93×4
24. 125×8
25. 54×12
26. 39×15
27. 248×6
28. 127×14
29. 305×18
30. 412×23

Section 4: Division (31–40)

Please show your work

31. $144 \div 12$
32. $420 \div 7$
33. $936 \div 9$
34. $648 \div 8$
35. $875 \div 5$
36. $1,296 \div 8$
37. $1,404 \div 12$
38. $2,450 \div 7$
39. $2,016 \div 14$
40. $3,255 \div 15$

Section 5: Fractions (41–50)

Please show your work

41. Write $\frac{8}{10}$ in simplest form.
42. Write $\frac{12}{20}$ in simplest form.
43. $\frac{1}{4} + \frac{2}{4}$
44. $\frac{3}{8} + \frac{4}{8}$
45. $\frac{7}{10} - \frac{2}{10}$
46. $\frac{9}{12} - \frac{3}{12}$
47. $\frac{2}{3} \times 3$
48. $\frac{3}{5} \times 5$
49. Write $\frac{6}{8}$ in simplest form.
50. Which is greater: $\frac{3}{4}$ or $\frac{2}{3}$?

Addition

- > Find the decimal
- > Line up the decimals
- > Fill in empty spots with zero
- > Add
- > Bring down the decimal in your answer

EXAMPLE

$10.5 + 11.74$

Rewritten with decimals lined up...

$$\begin{array}{r} 10.50 \\ + 11.74 \\ \hline 22.24 \end{array}$$

Subtraction

- > Find the decimal
- > Line up the decimals
- > Fill in empty spots with zero
- > Subtract
- > Bring down the decimal in your answer

EXAMPLE

$12.7 - 9.23$

Rewritten with decimals lined up...

$$\begin{array}{r} 12.70 \\ - 9.23 \\ \hline 3.47 \end{array}$$

Multiplication

- > The number with most digits goes on top
- > Decimals do not have to line up
- > Multiply like normal
- > Count how many places in first number the decimal is moved over
- > Count how many places in 2nd number the decimal is moved over
- > This is how many places you move the decimal in your answer

EXAMPLE

$$\begin{array}{r} 1.201 \\ \times 35 \\ \hline 6005 \\ 24020 \\ \hline 30025 \end{array}$$

< 3 DECIMAL PLACES

< 2 DECIMAL PLACES

< 5 DECIMAL PLACES

Section 6: Decimals (51–60) – refer to above chart for help

Please show your work

51. $4.5 + 2.3$
52. $8.9 - 3.4$
53. $5.75 + 2.16$
54. $10.0 - 4.87$
55. 3.4×6
56. 2.5×8
57. Compare: 0.56 ____ 0.65 (< or >)
58. Compare: 2.40 ____ 2.4 (< or >)
59. Round 8.764 to the nearest tenth.
60. Round 5.392 to the nearest hundredth.

Section 7: Geometry (61–70)

Types of Angles:

Acute: Less than 90°

Right: Exactly 90°

Obtuse: Greater than 90° but less than 180°

Straight: Exactly 180°

Rectangle:

Area: $\text{length} \times \text{width}$

Perimeter: $2(\text{length} + \text{width})$

Square:

Area: $\text{side} \times \text{side}$

Perimeter: $4 \times \text{side}$

61. Find the perimeter of a rectangle with length 8 cm and width 5 cm.
62. Find the area of a rectangle with length 7 cm and width 9 cm.
63. Classify a 45° angle. (acute, right or obtuse)
64. Classify a 90° angle. (acute, right or obtuse)
65. Classify a 120° angle. (acute, right or obtuse)
66. How many sides does a hexagon have?
67. How many sides does an octagon have?
68. Find the area of a square with side length 6 cm.
69. Find the perimeter of a square with side length 9 cm.
70. Draw and label a **right angle**.

Section 8: Measurement (71–80) Please show your work

1 foot = 12 inches	3 feet = 1 yard
1 gallon = 4 quarts	1 pound = 16 ounces
1 year = 12 months	1 hour = 60 minutes
1 meter = 100 centimeters	
1 kilometer = 1000 meters	

71. Convert 3 feet to inches.
72. Convert 5 yards to feet.
73. Convert 2 gallons to quarts.
74. Convert 24 inches into feet.
75. Convert 36 months to years.
76. Convert 90 minutes to hours and minutes.
77. Convert 4 pounds to ounces.
78. Convert 2 meters to centimeters.
79. Convert 3 kilometers to meters.
80. Convert 1 hour 45 minutes to minutes.

Section 9: Word Problems (81–90)

Please show your work

81. A school sold 245 tickets on Friday and 367 on Saturday. What were the total tickets sold?
82. A ticket costs \$4. How much money was collected from the sale of 612 tickets?
83. A bus seats 48 students. How many buses are needed for 240 students?
84. A box contains 12 pencils. How many pencils are in 8 boxes?
85. Maria read 125 pages on Monday and 138 pages on Tuesday. How many total pages did she read?
86. A box contains 36 apples. How many apples are in 7 boxes?
87. A rope is 18 feet long. It is cut into pieces that are 3 feet long. How many pieces are there now?
88. A teacher bought 24 markers for each of 5 classrooms. How many markers were bought?
89. A recipe uses 3 cups of flour. How much flour is needed for 4 batches?
90. A family drove 215 miles on Saturday and 187 miles on Sunday. How many miles were driven altogether?

Section 10: Challenge Problems (91–100)

91. A number multiplied by 8 equals 96. What is the number?
92. A number divided by 7 equals 12. What is the number?
93. What is the next number in the series: 5, 10, 15, 20, ____?
94. What is the next number in the series: 100, 90, 80, 70, ____?
95. Find the missing number: $18 + \underline{\quad} = 45$.
96. Find the missing number: $\underline{\quad} - 27 = 36$.
97. Find the missing number: $9 \times \underline{\quad} = 72$.
98. Find the missing number: $\underline{\quad} \div 6 = 11$.
99. The sum of two numbers is 50. One number is 22. What is the other number?
100. A rectangle has a perimeter of 30 inches. Its length is 10 inches. What is its width?

Summer Goal - Complete a few sections a week and bring the completed packet to school on the first day of Grade 6. If there are problems you don't know how to do, just try your best and it will be reviewed when you return. This pacing keeps skills fresh without taking too much time away from summer fun. 🌞 📖 ÷