

Summer Math Packet

Rising 7th Grade

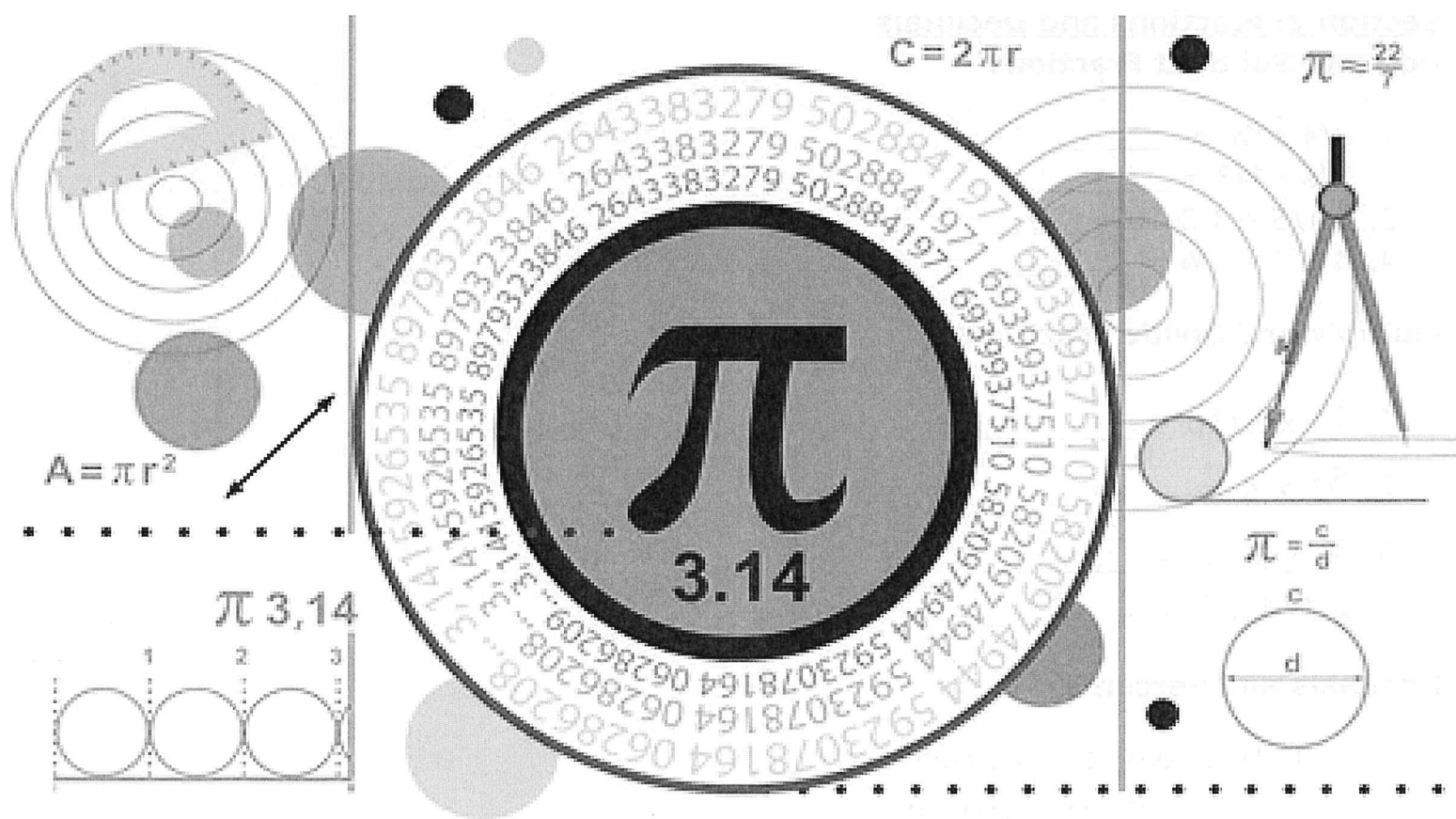
This summer packet will help you review important math skills and get ready for 7th grade. Try to work in 30 minute chunks and then take a short break. Maybe complete a little each week. Show all your work, and focus on the sections that are most challenging for you.

Name: _____

Test Grade Date Due: August 20, 2026

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1. Integer Operations
2. Fractions and Decimals
3. Ratios and Proportions
4. Expressions and Equations
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Section 1: Integer Operations

Add and Subtract Integers

1. $-12 + 7 =$ _____
2. $15 + (-19) =$ _____
3. $-8 - 14 =$ _____
4. $22 - (-6) =$ _____
5. $-17 + 25 =$ _____

Multiply and Divide Integers

1. $(-6)(8) =$ _____
2. $(-9)(-4) =$ _____
3. $72 \div (-9) =$ _____
4. $(-56) \div -7 =$ _____
5. $(-3)(-5)(2) =$ _____

Order of Operations

1. $18 - 4(2 + 3) =$ _____
 2. $7 + 12 \div 3 - 2 =$ _____
 3. $(-2)^3 + 5 =$ _____
 4. $6[4 - (8 - 5)] =$ _____
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Section 2: Fractions and Decimals

Add and Subtract Fractions

1. $\frac{3}{4} + \frac{1}{8} =$ _____
2. $\frac{5}{6} - \frac{1}{3} =$ _____
3. $2\frac{1}{5} + 1\frac{3}{10} =$ _____
4. $4\frac{1}{2} - 2\frac{3}{4} =$ _____

Multiply and Divide Fractions

1. $\frac{2}{3} \times \frac{9}{10} =$ _____
2. $\frac{5}{8} \times 4 =$ _____
3. $\frac{3}{5} \div \frac{9}{10} =$ _____
4. $2\frac{1}{4} \div \frac{3}{4} =$ _____

Decimals and Percents

1. Write 0.45 as a percent: _____
2. Write 72% as a decimal: _____
3. Find 25% of 160: _____

4. A shirt costs \$40 and is on sale for 15% off. What is the sale price? _____
 5. A \$120 pair of shoes is discounted by 35%. What is the sale price?
 6. After a 6% sales tax, a video game costs \$53. What was the original price before tax?
 7. A town's population increases from 24,000 to 27,000. What is the percent increase?
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Section 3: Ratios and Proportions

1. Simplify the ratio 18:24.
 2. If 3 notebooks cost \$9, how much will 7 notebooks cost?
 3. A recipe uses 2 cups of flour for every 5 cookies. How many cups of flour are needed for 20 cookies?
 4. A car travels 180 miles in 3 hours. What is the unit rate?
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Section 4: Expressions and Equations

Simplify Expressions

1. $4x + 3x - 5 =$ _____
2. $7a - 2 + 5a + 9 =$ _____
3. $3(2x + 4) =$ _____
4. $5(y - 2) + 7 =$ _____

Solve Equations

5. $x + 12 = 31$
 6. $5x = 45$
 7. $3x - 7 = 20$
 8. $2x + 9 = 25$
 9. $4(x - 2) = 24$
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Section 5: Geometry

Area and Perimeter

1. Find the area of a square with a side 7cm.
2. Find the perimeter of a rectangle with length 12 cm and width 5 cm.

Section 6: Statistics

Mean, Median, Mode, Range

Use the data set below for questions 1–4:

12, 15, 18, 12, 20, 25, 18

1. Mean: _____
2. Median: _____
3. Mode: _____
4. Range: _____

- Find the mean of: 8, 12, 15, 9, 16

Section 7: Word Problems

1. Maria earns \$12 per hour babysitting. If she works 18 hours, how much money will she earn?

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2. A movie theater sold 245 tickets on Friday and 318 tickets on Saturday. How many tickets were sold altogether?

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3. A water bottle holds 0.75 liters of water. How much water is in 8 bottles?

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4. The school cafeteria bought 15 boxes of apples. Each box contains 24 apples. How many apples were purchased?

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5. A student scored 84%, 91%, and 88% on three tests. What is the average test score?

Section 8: Challenges

- The sum of three consecutive integers is 96. What are the integers?
- Twice a number plus its half equals 45. Find the number.
- Using exactly four 4s and any operations, make the number 10.
 - e.g., $(4 \times 4) + 4 - 4 = \text{16}$ (*wrong*)
- A number is divisible by both 6 and 8. What is the smallest possible positive number?
- A train leaves at 2:15 PM and arrives at 6:50 PM. How long is the trip?
- The sum of three consecutive integers is 72. What are the integers?
- Create your own real-world math problem and solve it.

Problem:

Solution:

Here's how to play and solve Sudoku puzzles (on back) >>>

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Goal: Fill a 9×9 grid so that:

- Every **row** contains the numbers 1–9 exactly once
- Every **column** contains the numbers 1–9 exactly once
- Every **3×3 box** contains the numbers 1–9 exactly once

Some numbers are already given at the start.

Good luck!

					5			
	7	9	1				6	
	3					2		
				2		3		
		7						8
					9			1
5	4		6				1	
				4		9		
	6		5	3				

#177048

Difficulty: moderate

			3		9			8
						2		1
	1				2	6		
7				5	6	1	2	
		5						
2						9		
		9	8				7	3
				7				

#210492

Difficulty: moderate

			1		3		5	
				9				2
4			5	7		8		
		1		2	9			5
	7					3	1	
3		2	4				8	
		6						
						5	4	

#177669

Difficulty: moderate

1			2					6
7		6					3	
							8	2
	3			2	8		4	
	9				4			
		2			5			
	5	9		3				
		8				7		
			1			6		

#23352

Difficulty: moderate

							3	
7		4				2		
3			8					
		2	1	4				7
		1	6				8	
			5	1				
				2	7	8		5
	6	3			8		7	

#123478

Difficulty: moderate

	4							3
3			7				4	
		8	2			6		
1	5			4	9		2	
				5			3	8
				6	5	8		
7					2	1		5

#82133

Difficulty: moderate

Get new sudokus at <https://sudoku.cba.si/>Can't solve it? Check the solution at <https://sudoku.cba.si/>