6th Grade Math Summer Assignment

Welcome to your summer math review! This assignment will help you remember important math skills you learned in 5th grade and get ready for 6th grade.

The questions are organized by clusters: Numbers & Operations in Base Ten, Fractions, Operations & Algebraic Thinking, Geometry, and Measurement & Data.

Required Fluencies in Grade 5

5.NBT.B.5 Multiply multi-digit whole numbers using the standard algorithm

Take your time and do your best!

Numbers & Operations in Base Ten

Fill in the Blank:

Fill in the blank with the correct words.

1. The value of the digit 3 in the number 53,482 is _____.
2. When you multiply a number by 10, it moves one place to the _____.
3. In the number 4,205, the digit 2 is in the _____ place.
4. The difference between 7,000 and 3,245 is _____.
5. Rounding 8,462 to the nearest thousand gives _____.

Word Bank:
hundreds | left | 5,000 | 3,000 | 8,000

Multiple Choice Questions:
Choose the correct answer for each question.

1. What is 6,327+1,489
   a) 7,816
   b) 7,906
   c) 8,816
   d) 7,606

2. What is 9,400−2,157
   a) 7,243
   b) 6,243
   c) 7,247
   d) 8,243

3. What is the product of 36×20
   a) 540
   b) 720
   c) 560
   d) 620

4. What is the value of the digit 7 in 27,491
   a) 70
   b) 700
   c) 7,000
   d) 700,000

5. Which number is the greatest?
   a) 10,205
   b) 10,250
   c) 10,025
   d) 10,520

Open-Ended Questions:
Answer the following in complete sentences.

1. Explain how you would round 6,487 to the nearest hundred.
2. Describe the process you would use to subtract 3,957 from 8,000.
3. If a number is multiplied by 100, how does its value change? Give an example.

Fractions

Fill in the Blank:
Fill in the blank with the correct words.

1. $\frac{1}{2}$ is the same as _____ percent.

2. $\frac{3}{4}$ of 20 is _____.

3. To add $\frac{2}{5}$ and $\frac{1}{5}$, you add the _____ and keep the denominator the same.

4. $\frac{4}{8}$ can be simplified to _____.

5. The fraction $\frac{7}{10}$_____.than $\frac{3}{5}$.

Word Bank:
greater | 50 | numerators | 10 | $\frac{1}{2}$

Multiple Choice Questions:

6. Which of the following is equivalent to $\frac{2}{4}$

   a) $\frac{1}{2}$

   b) $\frac{2}{5}$

   c) $\frac{3}{4}$

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

7. What is $\frac{2}{3} + \frac{1}{3}$

   a) $\frac{2}{6}$

   b) $\frac{3}{3}$

   c) $\frac{1}{6}$

   d) $\frac{3}{6}$

8. What is $\frac{5}{8} - \frac{2}{8}$

   a) $\frac{3}{16}$

   b) $\frac{7}{8}$

   c) $\frac{3}{8}$

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

9. Which fraction is less than $\frac{3}{5}$

a) $\frac{4}{5}$

b) $\frac{2}{5}$

c) $\frac{5}{5}$

d) $\frac{6}{10}$

10. What is $2\ \frac{1}{4}$ as an improper fraction?

a) $\frac{9}{4}$

b) $\frac{6}{4}$

c) $\frac{8}{4}$

d) $\frac{7}{4}$

Open-Ended Questions:
Answer the following in complete sentences.

1. Explain how to compare $\frac{2}{3}$ and $\frac{3}{4}$
2. Describe a real-life situation where you would use fractions.
3. Show how to add $\frac{1}{6}$ and $\frac{1}{3}$, and explain your steps.

Operations & Algebraic Thinking

Fill in the Blank:
Fill in the blank with the correct words.

1. The value of the expression $5\times(2+3)$ is _____.
2. The sum of all even numbers from 2 to 10 is _____.
3. If $n=4$, then $3n$ equals _____.
4. The operation that finds the total when two numbers are put together is called _____.
5. The pattern 2, 4, 6, 8, _ ***, 12,*** _ continues with _____ a _____.

Word Bank:
addition | 10 | 20 | 5 | 12 | 14 | 30

Multiple Choice Questions:
Choose the correct answer for each question.

1. What is $8 \div 2$?
   a) 6
   b) 4
   c) 16
   d) 2

2. If $x=7$, what is $2x+3$?
   a) 10
   b) 14
   c) 17
   d) 13

3. Which number goes next in the pattern: 3, 6, 9, _?
   a) 10
   b) 12
   c) 15
   d) 18

4. What is $15-(4+3)$?
   a) 8
   b) 11
   c) 12
   d) 7

5. Which equation is true?
   a) $6 \times 2=10$
   b) $5+5=15$
   c) $9-3=6$
   d) $4 \div 2=1$

Open-Ended Questions:
Answer the following in complete sentences.

1. Create and solve a simple equation using a variable.
2. Explain how you use patterns to solve problems in math.
3. Describe a time when you used math operations to solve a real-world problem.

Geometry

Fill in the Blank:
Fill in the blank with the correct words.

1. A triangle has _____ sides.
2. The shape with four equal sides and four right angles is called a _____.
3. The point where two lines meet is called a _____.
4. A rectangle has _____ right angles.
5. The distance around a shape is called its _____.

Word Bank:
perimeter | square | four | three | vertex

Multiple Choice Questions:
Choose the correct answer for each question.

1. Which shape has no straight sides?
   a) Triangle
   b) Square
   c) Circle
   d) Rectangle
2. How many vertices does a rectangle have?
   a) 3
   b) 4
   c) 5
   d) 6
3. What is the area of a rectangle with length 8 units and width 3 units?
   a) 24 square units
   b) 11 square units
   c) 22 square units
   d) 18 square units
4. Which shape is a quadrilateral?
   a) Triangle
   b) Circle
   c) Rectangle
   d) Pentagon
5. The line segment joining two points is called a:
   a) ray
   b) line
   c) segment
   d) angle

Open-Ended Questions:
Answer the following in complete sentences.

1. Describe the difference between a square and a rectangle.
2. Draw and label a triangle, a rectangle, and a circle.
3. Explain how you find the area of a rectangle.

Measurement & Data

Fill in the Blank:
Fill in the blank with the correct words.

1. There are _____ centimeters in a meter.
2. A clock shows 3:30. That means it is _____ past three.
3. If a pencil is 15 cm long, it is _____ than a 20 cm pencil.
4. The temperature is measured in degrees _____.
5. The amount of liquid a container can hold is its _____.

Word Bank:
shorter | 100 | thirty | volume | Celsius

Multiple Choice Questions:
Choose the correct answer for each question.

1. How many milliliters are in a liter?
   a) 10
   b) 100
   c) 1,000
   d) 10,000

2. If a box measures 5 cm by 5 cm by 5 cm, what is its volume?
   a) 25 cubic cm
   b) 125 cubic cm
   c) 15 cubic cm
   d) 75 cubic cm

3. Which is longer, 1 meter or 90 centimeters?
   a) 1 meter
   b) 90 centimeters
   c) They are equal
   d) Not enough information

4. What tool would you use to measure the mass of an apple?
   a) Thermometer
   b) Ruler
   c) Balance scale
   d) Measuring cup

5. If a graph shows that 5 students like apples and 7 like oranges, how many students were asked?
   a) 10
   b) 11
   c) 12
   d) 13

Open-Ended Questions:
Answer the following in complete sentences.

1. Explain how you would measure the length of your desk.
2. Describe a situation where you would use a graph to show information.
3. How do you decide which unit to use when measuring something?
