

Incoming 6th Grade Math Summer Work

This summer, you will complete two types of math tasks to keep your math skills strong:

- iXL Quizzes:
 - Complete the iXL quizzes. You must submit your work to receive credit.
- Create a Math Game:
 - Design a game based on a math skill we covered this year. Your game should fit inside a gallon-sized Ziploc bag.

Your task is to create a game about one of the skills we covered this year during math. Your game should be able to fit in a gallon sized ziploc bag. In the bag include: game directions, game pieces, and an answer key. Your game can be modeled from any board game that already exists or a completely new idea. Your game should take between 10 and 15 minutes to play. You may also create a digital game if you prefer. All games must be uniquely your work. You can use IXL and Envision Books/online platform for question ideas.

Topics to Consider:

- Order of Operations/Numerical Expressions
- Long Division of Whole Numbers and/or Decimals
- Rounding to ANY place value
- Decimal Operations (add, subtract, multiply and divide)
- Fraction Operations (add, subtract, multiply and divide)
- Forming Equivalent Fractions
- Writing Fractions in Simplest Form
- Converting Improper Fractions to Mixed Numbers and Mixed Numbers into Improper Fractions
- Area/Volume
- Classifying Triangles and/or Quadrilaterals

Use this checklist to help plan and make your game.

- Directions
- Game Pieces
- Game Board / Cards
- Answer Key
- Includes at least 5 real world problems
- Neat & Organized

Trabajo de verano de matemáticas

de sexto grado entrante

Este verano, completarás dos tipos de tareas matemáticas para fortalecer tus habilidades:

- Cuestionarios iXL:
 - Completa los cuestionarios iXL. Debes entregar tu trabajo para recibir el crédito.
- Crea un juego matemático:
 - Diseña un juego basado en una habilidad matemática que hayamos visto este año. Tu juego debe caber en una bolsa Ziploc de un galón.

Tu tarea es crear un juego sobre una de las habilidades que vimos este año en matemáticas. Tu juego debe caber en una bolsa ziploc de un galón. En la bolsa incluye: instrucciones, piezas y una clave de respuestas. Puedes inspirarte en cualquier juego de mesa existente o en una idea completamente nueva. El juego debe durar entre 10 y 15 minutos. También puedes crear un juego digital si lo prefieres. Todos los juegos deben ser exclusivamente tuyos. Puedes usar IXL y la plataforma en línea Envision Books para obtener ideas para las preguntas.

Temas a considerar:

- Orden de operaciones/Expresiones numéricas
- División larga de números enteros o decimales
- Redondeo a cualquier valor posicional
- Operaciones con decimales (suma, resta, multiplicación y división)
- Operaciones con fracciones (suma, resta, multiplicación y división)
- Formación de fracciones equivalentes
- Escritura de fracciones en su mínima expresión
- Conversión de fracciones impropias a números mixtos y de números mixtos a fracciones impropias
- Área/Volumen
- Clasificación de triángulos o cuadriláteros

Usa esta lista de verificación para planificar y crear tu juego.

- Instrucciones
- Fichas del juego
- Tablero/Tarjetas de juego
- Clave de respuestas
- Incluye al menos 5 problemas prácticos
- Ordenado y ordenado

Summer Work Pacing Guide

Week 1 (6/15-6/21)

- IXL Quiz 1
- Choose Board Game Topic

Week 2 (6/22-6/28)

- IXL Quiz 2
- Choose Game Model (Physical or Digital)

Week 3 (6/29-7/5)

- IXL Quiz 3
- Create Game Directions

Week 4 (7/6-7/12)

- IXL Quiz 4
- Create Game Pieces

Week 5 (7/13-7/19)

- IXL Quiz 5
- Create Game Questions/Problems

Week 6 (7/20-7/26)

- IXL Quiz 6
- Create Game Board/Cards

Week 7 (7/27-8/2)

- IXL Quiz 7
- Create Game Answer Key

Week 8 (8/3-8/9)

- IXL Quiz 8
- Finish Math Game

Week 9 (8/10-8/16)

- Finish Math Game

Week 10 (8/17-8/23)

- Finish Math Game

Week 11 (8/24-8/30)

- Finish Math Game

Guía para el ritmo de trabajo de verano

Semana 1 (15/6-21/6)

- Cuestionario IXL 1
- Elige el tema del juego de mesa

Semana 2 (22/6-28/6)

- Cuestionario IXL 2
- Elige el modelo del juego (físico o digital)

Semana 3 (29/6-5/7)

- Cuestionario IXL 3
- Crea las instrucciones del juego

Semana 4 (6/7-12/7)

- Cuestionario IXL 4
- Crea las piezas del juego

Semana 5 (13/7-19/7)

- Cuestionario IXL 5
- Crea las preguntas/problemas del juego

Semana 6 (20/7-26/7)

- Cuestionario IXL 6
- Crea el tablero/las cartas del juego

Semana 7 (27/7-2/8)

- Cuestionario IXL 7
- Crea la clave de respuestas del juego

Semana 8 (3/8-9/8)

- Cuestionario IXL 8
- Termina el juego de matemáticas

Semana 9 (10-16/8)

- Termina el juego de matemáticas

Semana 10 (17-23/8)

- Termina el juego de matemáticas

Semana 11 (24-30/8)

- Termina el juego de matemáticas

Quiz 1

Numerical Expressions

1. Evaluate the expression.

$$8 \times (8 \div 2 + 3)$$

2. Evaluate the expression.

$$7 + (9 \times 7 \div 7 \times 10)$$

3. Evaluate the expression.

$$10 + (8 + 7) \times 6$$

4. Evaluate the expression.

$$6 \times (9 + 2) \div 2 \times 3$$

5. Evaluate the expression.

$$(7 + 10) + (10 \times 6)$$

6. Evaluate the expression.

$$6 \div 3 + (6 \times 6 + 1)$$

7. Evaluate the expression.

$$7 + (7 \times 6) - 9 - 6$$

8. Evaluate the expression.

$$(8 \div 1) + (8 + 1)$$

9. Evaluate the expression.

$$(7 \times 4) + (9 \times 2)$$

10. Evaluate the expression.

$$7 \times 4 + (6 \times 2) - 1$$

Quiz 2

Write Numerical Expressions

1. Write an expression for the sequence of operations described below.

add eight and the quotient of seven and two

Type x if you want to use a multiplication sign. Type / if you want to use a division sign. Do not simplify any part of the expression.

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2. Write an expression for the sequence of operations described below.

subtract the quotient of three and two from nine

Type x if you want to use a multiplication sign. Type / if you want to use a division sign. Do not simplify any part of the expression.

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3. Write an expression for the sequence of operations described below.

subtract the product of three and two from six

Type x if you want to use a multiplication sign. Type / if you want to use a division sign. Do not simplify any part of the expression.

4. Write an expression for the sequence of operations described below.

seven decreased by the difference of ten and five

Type x if you want to use a multiplication sign. Type / if you want to use a division sign. Do not simplify any part of the expression.

5. Write an expression for the sequence of operations described below.

nine increased by the quotient of five and six

Type x if you want to use a multiplication sign. Type / if you want to use a division sign. Do not simplify any part of the expression.

6. Write an expression for the sequence of operations described below.

eight increased by the quotient of seven and ten

Type x if you want to use a multiplication sign. Type / if you want to use a division sign. Do not simplify any part of the expression.

7. Write an expression for the sequence of operations described below.

three increased by the sum of five and six

Type x if you want to use a multiplication sign. Type / if you want to use a division sign. Do not simplify any part of the expression.

8. Write an expression for the sequence of operations described below.

double the product of three and four

Type x if you want to use a multiplication sign. Type / if you want to use a division sign. Do not simplify any part of the expression.

9. Write an expression for the sequence of operations described below.

three divided by the product of six and eight

Type x if you want to use a multiplication sign. Type / if you want to use a division sign. Do not simplify any part of the expression.

10. Write an expression for the sequence of operations described below.

nine decreased by the difference of ten and eight

Type x if you want to use a multiplication sign. Type / if you want to use a division sign. Do not simplify any part of the expression.

Quiz 3

Add and Subtract Fractions

1. Subtract.

$$\frac{3}{10} - \frac{1}{4} = \boxed{}$$

2. Add.

$$\frac{7}{11} + \frac{1}{6} = \boxed{}$$

3. Add.

$$\frac{3}{7} + \frac{1}{3} = \boxed{}$$

4. Add.

$$\frac{3}{11} + \frac{1}{2} = \boxed{}$$

5. Add.

$$\frac{1}{5} + \frac{1}{2} = \boxed{}$$



6. Subtract.

$$\frac{5}{11} - \frac{2}{5} = \boxed{}$$

7. Subtract.

$$\frac{5}{7} - \frac{1}{2} = \boxed{}$$

8. Subtract.

$$\frac{9}{10} - \frac{5}{11} = \boxed{}$$

9. Subtract.

$$\frac{2}{3} - \frac{1}{2} = \boxed{}$$

10. Add.

$$\frac{1}{9} + \frac{5}{6} = \boxed{}$$

Quiz 4

Multiply with mixed numbers

1. Multiply. Write your answer as a fraction or as a whole or mixed number.

$$\frac{1}{2} \times 2\frac{1}{2} = \boxed{}$$

2. Multiply. Write your answer as a fraction or as a whole or mixed number.

$$\frac{2}{3} \times 1\frac{5}{6} = \boxed{}$$

3. Multiply. Write your answer as a fraction or as a whole or mixed number.

$$\frac{4}{9} \times 9\frac{1}{2} = \boxed{}$$

4. Multiply. Write your answer as a fraction or as a whole or mixed number.

$$5\frac{3}{8} \times \frac{1}{3} = \boxed{}$$

5. Multiply. Write your answer as a fraction or as a whole or mixed number.

$$8\frac{9}{10} \times \frac{8}{9} = \boxed{}$$

6. Multiply. Write your answer as a fraction or as a whole or mixed number.

$$7\frac{2}{3} \times \frac{1}{3} = \boxed{}$$

7. Multiply. Write your answer as a fraction or as a whole or mixed number.

$$\frac{1}{5} \times 10\frac{3}{7} = \boxed{}$$

8. Multiply. Write your answer as a fraction or as a whole or mixed number.

$$3\frac{3}{4} \times \frac{4}{9} = \boxed{}$$

9. Multiply. Write your answer as a fraction or as a whole or mixed number.

$$1\frac{6}{7} \times \frac{1}{7} = \boxed{}$$

10. Multiply. Write your answer as a fraction or as a whole or mixed number.

$$6\frac{9}{10} \times \frac{3}{10} = \boxed{}$$

Quiz 5

Divide by Decimals

1. Divide. Give the exact answer, written as a decimal.

$$\begin{array}{r} \boxed{} \\ 2.5 \overline{) 13} \end{array}$$

2. Divide. Give the exact answer, written as a decimal.

$$\begin{array}{r} \boxed{} \\ 5.6 \overline{) 7} \end{array}$$

3. Divide. Give the exact answer, written as a decimal.

$$\begin{array}{r} \boxed{} \\ 1.6 \overline{) 67.8} \end{array}$$

4. Divide. Give the exact answer, written as a decimal.

$$3 \div 2.5 = \boxed{}$$

5. Divide. Give the exact answer, written as a decimal.

$$\begin{array}{r} \boxed{} \\ 1.8 \overline{) 69.3} \end{array}$$

6. Divide. Give the exact answer, written as a decimal.

$$\begin{array}{r} \boxed{} \\ 0.16 \overline{) 5} \end{array}$$

7. Divide. Give the exact answer, written as a decimal.

$$\begin{array}{r} \boxed{} \\ 0.08 \overline{) 1} \end{array}$$

8. Divide. Give the exact answer, written as a decimal.

$$\begin{array}{r} \boxed{} \\ 2.5 \overline{) 7} \end{array}$$

9. Divide. Give the exact answer, written as a decimal.

$$57 \div 0.48 = \boxed{}$$

10. Divide. Give the exact answer, written as a decimal.

$$64.2 \div 1.5 = \boxed{}$$

Quiz 6

Add and Subtract Decimals

1. Subtract.

$$441.11 - 220.11 = \boxed{}$$

2. Add.

$$47.79 + 79.97 = \boxed{}$$

3. Add.

$$52.88 + 96.24 = \boxed{}$$

4. Subtract.

$$620.08 - 250.96 = \boxed{}$$

5. Subtract.

$$969.67 - 318.51 = \boxed{}$$

6. Add.

$$40.34 + 35.76 = \boxed{}$$

37.306

7. Add.

$$205.3 + 805.4 = \boxed{}$$

8. Subtract.

$$61.2 - 15.7 = \boxed{}$$

9. Add.

$$66.9 + 87.8 = \boxed{}$$

10. Subtract.

$$919.32 - 690.95 = \boxed{}$$

Quiz 7

Factor Pairs

1. Find all the factor pairs for 24 and complete the equations. Each equation should use a *different* pair of factors.

$$24 = \boxed{} \times \boxed{}$$

$$24 = \boxed{} \times \boxed{}$$

$$24 = \boxed{} \times \boxed{}$$

$$24 = \boxed{} \times \boxed{}$$

2. Find all the factor pairs for 20 and complete the equations. Each equation should use a *different* pair of factors.

$$20 = \boxed{} \times \boxed{}$$

$$20 = \boxed{} \times \boxed{}$$

$$20 = \boxed{} \times \boxed{}$$

3. Find all the factor pairs for 68 and complete the equations. Each equation should use a *different* pair of factors.

$$68 = \boxed{} \times \boxed{}$$

$$68 = \boxed{} \times \boxed{}$$

$$68 = \boxed{} \times \boxed{}$$

4. Find all the factor pairs for 48 and complete the equations. Each equation should use a *different* pair of factors.

$$48 = \boxed{} \times \boxed{}$$

$$48 = \boxed{} \times \boxed{}$$

$$48 = \boxed{} \times \boxed{}$$

$$48 = \boxed{} \times \boxed{}$$

$$48 = \boxed{} \times \boxed{}$$

5. Find all the factor pairs for 16 and complete the equations. Each equation should use a *different* pair of factors.

$$16 = \boxed{} \times \boxed{}$$

$$16 = \boxed{} \times \boxed{}$$

$$16 = \boxed{} \times \boxed{}$$

6. Find all the factor pairs for 55 and complete the equations. Each equation should use a *different* pair of factors.

$$55 = \boxed{} \times \boxed{}$$

$$55 = \boxed{} \times \boxed{}$$

7. Find all the factor pairs for 33 and complete the equations. Each equation should use a *different* pair of factors.

$$33 = \boxed{} \times \boxed{}$$

$$33 = \boxed{} \times \boxed{}$$

8. Find all the factor pairs for 64 and complete the equations. Each equation should use a *different* pair of factors.

$$64 = \boxed{} \times \boxed{}$$

$$64 = \boxed{} \times \boxed{}$$

$$64 = \boxed{} \times \boxed{}$$

$$64 = \boxed{} \times \boxed{}$$

9. Find all the factor pairs for 76 and complete the equations. Each equation should use a *different* pair of factors.

$$76 = \boxed{} \times \boxed{}$$

$$76 = \boxed{} \times \boxed{}$$

$$76 = \boxed{} \times \boxed{}$$

10. Find all the factor pairs for 12 and complete the equations. Each equation should use a *different* pair of factors.

$$12 = \boxed{} \times \boxed{}$$

$$12 = \boxed{} \times \boxed{}$$

$$12 = \boxed{} \times \boxed{}$$

Quiz 8

Divide with Fractions

1. Divide.

$$\frac{1}{3} \div 4 = \boxed{}$$

2. Divide.

$$2 \div \frac{1}{4} = \boxed{}$$

3. Divide.

$$3 \div \frac{1}{3} = \boxed{}$$

4. Divide.

$$\frac{1}{4} \div 3 = \boxed{}$$

5. Divide.

$$\frac{1}{5} \div 2 = \boxed{}$$

6. Divide.

$$\frac{1}{3} \div 3 = \boxed{}$$



7. Divide.

$$4 \div \frac{1}{3} = \boxed{}$$

8. Divide.

$$2 \div \frac{1}{5} = \boxed{}$$

9. Divide.

$$3 \div \frac{1}{4} = \boxed{}$$

10. Divide.

$$3 \div \frac{1}{2} = \boxed{}$$