

**Summer Pre-Requisite Skills Practice 2** (Incoming grade 8 students) **NAME** \_\_\_\_\_

Show all your work in the space provided. **Circle** your answer. **Do not** use a calculator.

**Integer Operations**

In Exercises 1-4, perform the indicated operation. Write your answers as mixed numbers in simplest form.

|    |                 |
|----|-----------------|
| 1. | $-36 + -72 =$   |
| 2. | $-111 + 42 =$   |
| 3. | $16 - 54 =$     |
| 4. | $-89 - (-65) =$ |

Need help? <https://learnzillion.com/lessonsets/137>  
<https://www.google.com/#q=khan+academy+integer+operations>

**Rounding**

|    |  |
|----|--|
| 5. | Round 24.589 to the nearest hundredth.   |
| 6. | Round 204.859 to the nearest tenth.      |
| 7. | Round 24.5824 to the nearest thousandth. |

Need help? <https://learnzillion.com/lessons/3522-round-decimals-to-any-place>

**Distributive Property with Fractions**

|                                 |                                   |                                  |
|---------------------------------|-----------------------------------|----------------------------------|
| 8.)                             | 9.)                               | 10.)                             |
| $\frac{2}{5} (x - \frac{1}{6})$ | $\frac{2}{-7} (x + 1\frac{7}{6})$ | $\frac{-4}{9} (x - \frac{1}{8})$ |

Need help? [https://www.khanacademy.org/math/pre-algebra/order-of-operations/distributive\\_property/a/distributive-property-explained](https://www.khanacademy.org/math/pre-algebra/order-of-operations/distributive_property/a/distributive-property-explained)

## Order of Operations

Simplify: 11.)  $-4 \cdot [3 + (-10)] - 3^2$       12.)  $-3\frac{2}{3} \div (\frac{7}{6} + 2\frac{1}{2})$       13.)  $15 - 24 \div 4 \cdot 2$

Need help? <http://study.com/academy/lesson/order-of-operations.html>

## Multiplication and Division with Decimals (Round answers to the nearest thousandth.)

14.)  $8.8 \times 1.765$

15.)  $4.23 \div 3.9$

16.)  $2.66 \times 9.8$

Need help?

<https://www.khanacademy.org/math/pre-algebra/decimals-pre-alg/multiplying-decimals-pre-alg/v/intro-to-multiplying-decimals>

## Multiplication and Division with Fractions

17.)

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

18.)

$$7 \times \frac{3}{5} =$$

19.)

$$6\frac{8}{10} \div 1\frac{1}{2} =$$

Need help? <https://learnzillion.com/lessons/215-multiply-mixed-numbers-by-renaming-factors>

<https://learnzillion.com/lessons/3362-multiply-mixed-numbers-by-mixed-numbers-using-visual-representations>

For #20-22, convert each fraction to a decimal.

20.)  $\frac{21}{80}$

21.)  $\frac{4}{15}$

22.)  $\frac{28}{5}$

Need help? <https://learnzillion.com/lessonsets/10-convert-between-fractions-and-decimals>

Solving Equations: Solve for the indicated variable.

23.)  $-9x - 13 = -103$

24.)  $9x + 7 = 7$

25.)  $6 = \frac{a}{4} + 2$

Need help? <http://www.virtualnerd.com/pre-algebra/one-two-step-equations/two-step/two-step-solution/two-step-example>

**\*\*I had difficulty with the following questions (circle all that apply):**

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

**\*\*After looking at the tutorials, I am still having trouble with the following (check all that apply):**

- Integer Operations (#1-4)
- Rounding (#5-7)
- Distributive Property (#8-10)
- Order of Operations (#11-13)

- Decimal Operations (#14-16)
- Fraction Operations (#17-19)
- Conversions (#20-22)
- Solving Equations (#23-25)