



beyond **tutoring**

Transforming lives, not just marks



Number & Algebra

Computation with Integers

Name _____

Class _____

Lesson Outcomes

Carry out the 4 operations (+, -, x, ÷) with integers efficiently with mental and written strategies

Introductory notes

- An integer is a whole number, and can either be positive or negative
- Examples of integers are:
 - -1
 - 2
 - -328
 - 93
- Examples of numbers that are NOT integers:
 - $\frac{1}{2}$
 - 0.93
 - -0.42
 - 14.8

BODMAS – brackets of division, multiplication, addition, subtraction

This sequence explains the order of operation you should follow to solve an expression.

This is very important when computing integers.

NOTE

$-(-) = + \rightarrow$ a negative multiplied by a negative is positive.

$-(+) = - \rightarrow$ a negative multiplied by a positive is negative.

Anything multiplied by 0 equals 0.



Adding Integers

Solve the following equations by adding the integers.

1. $4 + 3$

2. $9 + 2$

3. $24 + 53$

4. $-2 + 3$

5. $14 + (-6)$

6. $-17 + (-4)$

7. $9 + 2 + (-4) + 16$

Subtracting Integers

Solve the following equations by subtracting the integers.

1. $5 - 3$

2. $7 - 2$

3. $9 - 15$

4. $6 - 10$

5. $-12 + 10$

6. $-5 - 21$

7. $-15 + 10$

8. $-3 - (-12)$

9. $-9 + (-4)$

Multiplying Integers

Solve the following equations by multiplying the integers.

1. 2×3

2. 4×3

3. 9×4

4. 11×16

5. 7×0

6. 5×-2

7. -12×-3

8. -9×14

9. 1×1



Dividing Integers

Solve the following equations by dividing the integers.

1. $6 \div 2$

2. $-20 \div 5$

3. $-12 \div 4$

4. $16 \div -4$

5. $-15 \div -5$

6. $4 + 6 \div 3$

7. $-9 \div 3 + 2$

8. $12 \div (-4 + 2)$

9. $48 \div (6 \times 3 - 4)$



Challenge Questions

1. $1 - 2 + 3 - 4 + \dots + 97 - 98 + 99 - 100$

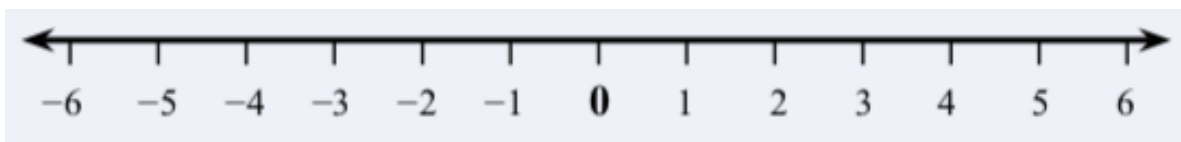
2. 10% of 43

3. 24×5

4. $14(-6 \times 4) - 4(9 \times -3)$

5. John is standing on -3 and facing towards the zero when she is given the following instructions:
- Move 3 units forward.
 - Move 4 units backward.
 - Move 7 units forward.

Where is John now standing?



6. $12 \div (-5 + 2)$

7. The Roman civilisation began around 500 BC and finished around 475 AD.
How long did the Roman civilisation last?

