

Directions and/or Suggestions for Implementing Grouped Integer Activities

Students should use Ball Point Pens with no Erasers, if possible and if appropriate!

Students should be allowed to start anywhere in Activities and with any of (4) Operations!

Students should be allowed a Times Table or Column Facts! **Calculator if appropriate!**

After completion of the Grouped Activities, Students should Grade their Answers!

During Grading of the Activities, Students should Cross Through any Wrong Ones!

Students have a tendency to erase (Pencil) Wrong Answers and Replace with Right Ones!

Replacing Right Ones with Wrong Ones does not allow opportunity to Learn, Why wrong!

After Students have Graded Grouped Activities, they correct wrong ones, showing work!

Usually, Stronger Students finish first and they can correct wrong ones with little or no help!

As more Challenged Students finish, Students should gather in Collaborative Teams!

These Collaborative Teams should be carefully selected with a Strong Student as Leader!

There should not be more than 2 or 3 in a Collaborative Team. One Leader & Challenged!

Team Leaders should assist Challenged Students with correcting their wrong answers!

If not enough Students are Strong enough to be Leaders then Challenged work with Challenged!

Teachers mingle around classroom, when asked about a problem, suggest Leader to answer it!

Creates an atmosphere of Students helping Students and Teachers facilitating activities!

Completing, Grading Activities, Correcting Activities, and Collaborating should be a Period!

If any Students want to take an extra Activity Home for more Practice then that is the Plan!

Many times Students will want another activity especially the Stronger Ones but not at this time!

Computational Activities alternate between Conceptual Activities... Every other Day!

Additional Classroom or WWW activities are encouraged to allow practice with All Number Types!

Beginning Numbers * Grouped Integers 1 A

Fundamental Operations: Addition, Subtraction, Multiplication, Division with Integers

Principle (Rule) of Signs: $(+3) = + + +$ $(-4) = - - - -$ $(+5) = + + + + +$ $(-2) = - -$

Principle of Opposites: $(+3)+(-3) = 0$ $(-4)+(+4) = 0$ $(+5)+(-2) = +3$ $(+3)+(-7) = -4$

Addition (Combining of Signs)

Same Signs => Combine Values then Common Sign! Different Signs => Cancel Values then Sign of Result!

$$(+2) + (+9) = \underline{\quad}$$

$$(+3) + (-6) = \underline{\quad}$$

$$(-3) + (-7) = \underline{\quad}$$

$$(-2) + (+7) = \underline{\quad}$$

$$(+4) + (-8) = \underline{\quad}$$

$$(+5) + (+9) = \underline{\quad}$$

$$(-5) + (+6) = \underline{\quad}$$

$$(-4) + (-8) = \underline{\quad}$$

Subtraction (Add the Opposite!)

Change Subtraction to Addition **then** Change Sign of Second Number to Opposite Sign then Combine!

$$(+2) - (+9) = \underline{\quad}$$

$$(+3) - (-7) = \underline{\quad}$$

$$(-3) - (-8) = \underline{\quad}$$

$$(-2) - (+6) = \underline{\quad}$$

$$(+4) - (-6) = \underline{\quad}$$

$$(+5) - (+8) = \underline{\quad}$$

$$(-5) - (+7) = \underline{\quad}$$

$$(-4) - (-9) = \underline{\quad}$$

Multiplication (Same Signs (+) & Different Signs (-))

Multiply then If Signs are the Same then Result is (+)!

Multiply then If Signs are Different then Result is (-)!

$$(+2) \times (+9) = \underline{\quad}$$

$$(+3) \times (-6) = \underline{\quad}$$

$$(-3) \times (-8) = \underline{\quad}$$

$$(-2) \times (+7) = \underline{\quad}$$

$$(+4) \times (-7) = \underline{\quad}$$

$$(+5) \times (+8) = \underline{\quad}$$

$$(-5) \times (+6) = \underline{\quad}$$

$$(-4) \times (-9) = \underline{\quad}$$

Division (Same Signs (+) & Different Signs (-))

Divide then If Signs are the Same then Result is (+)! Divide then If Signs are Different then Result is (-)!

$$(+6) / (+2) = \underline{\quad}$$

$$(+28) / (-7) = \underline{\quad}$$

$$(-12) / (-3) = \underline{\quad}$$

$$(-12) / (+6) = \underline{\quad}$$

$$(+8) / (-4) = \underline{\quad}$$

$$(+27) / (+9) = \underline{\quad}$$

$$(-15) / (+5) = \underline{\quad}$$

$$(-16) / (-8) = \underline{\quad}$$

Beginning Numbers * Grouped Integers 1 B

Fundamental Operations: Addition, Subtraction, Multiplication, Division with Integers

Principle of Signs: $(+4) = + + + +$ $(-3) = - - -$ $(+2) = + +$ $(+5) = - - - - -$

Principle of Opposites: $(+2)+(-2) = 0$ $(-3)+(3) = 0$ $(+5)+(-2) = +3$ $(+3)+(-7) = -4$

Addition (Combining of Signs!)

Same Signs => Combine Values then Common Sign! Different Signs => Cancel Values then Sign of Result!

$$(+2) + (+6) = \underline{\quad}$$

$$(+3) + (-8) = \underline{\quad}$$

$$(-3) + (-7) = \underline{\quad}$$

$$(-2) + (+9) = \underline{\quad}$$

$$(+4) + (-9) = \underline{\quad}$$

$$(+5) + (+7) = \underline{\quad}$$

$$(-5) + (+8) = \underline{\quad}$$

$$(-4) + (-6) = \underline{\quad}$$

Subtraction (Add the Opposite!)

Change Subtraction to Addition then Change Sign of Second Number to Opposite Sign then Combine!

$$(+2) - (+7) = \underline{\quad}$$

$$(+3) - (-9) = \underline{\quad}$$

$$(-3) - (-6) = \underline{\quad}$$

$$(-2) - (+8) = \underline{\quad}$$

$$(+4) - (-8) = \underline{\quad}$$

$$(+5) - (+6) = \underline{\quad}$$

$$(-5) - (+9) = \underline{\quad}$$

$$(-4) - (-7) = \underline{\quad}$$

Multiplication (Same Signs (+) & Different Signs (-))

Multiply then If Signs are the Same then Result is (+)!

Multiply then If Signs are Different then Result is (-)!

$$(+2) \times (+6) = \underline{\quad}$$

$$(+3) \times (-9) = \underline{\quad}$$

$$(-3) \times (-7) = \underline{\quad}$$

$$(-2) \times (+8) = \underline{\quad}$$

$$(+4) \times (-8) = \underline{\quad}$$

$$(+5) \times (+7) = \underline{\quad}$$

$$(-5) \times (+9) = \underline{\quad}$$

$$(-4) \times (-6) = \underline{\quad}$$

Division (Same Signs (+) & Different Signs (-))

Divide then If Signs are the Same then Result is (+)! Divide then If Signs are Different then Result is (-)!

$$(+6) \div (+3) = \underline{\quad}$$

$$(+21) \div (-7) = \underline{\quad}$$

$$(-8) \div (-2) = \underline{\quad}$$

$$(-18) \div (+6) = \underline{\quad}$$

$$(+12) \div (-4) = \underline{\quad}$$

$$(+36) \div (+9) = \underline{\quad}$$

$$(-10) \div (+5) = \underline{\quad}$$

$$(-24) \div (-8) = \underline{\quad}$$

Beginning Numbers * Grouped Integers 1 C

Fundamental Operations: Addition, Subtraction, Multiplication, Division with Integers

Principle (Rule) of Signs: $(+3) = + + +$ $(-4) = - - - -$ $(+5) = + + + + +$ $(-2) = - -$

Principle of Opposites: $(+3)+(-3) = 0$ $(-4)+(+4) = 0$ $(+5)+(-2) = +3$ $(+3)+(-7) = -4$

Addition (Combining of Signs!)

Same Signs => Combine Values then Common Sign! Different Signs => Cancel Values then Sign of Result!

$$(-2) + (-6) = \underline{\quad}$$

$$(-3) + (+9) = \underline{\quad}$$

$$(+3) + (+5) = \underline{\quad}$$

$$(+2) + (-6) = \underline{\quad}$$

$$(-4) + (+7) = \underline{\quad}$$

$$(-5) + (-8) = \underline{\quad}$$

$$(+5) + (-8) = \underline{\quad}$$

$$(+4) + (+7) = \underline{\quad}$$

Subtraction (Add the Opposite!)

Change Subtraction to Addition then Change Sign of Second Number to Opposite Sign then Combine!

$$(-2) - (-6) = \underline{\quad}$$

$$(-3) - (+8) = \underline{\quad}$$

$$(+3) - (+9) = \underline{\quad}$$

$$(+2) - (-9) = \underline{\quad}$$

$$(-4) - (+7) = \underline{\quad}$$

$$(-5) - (-6) = \underline{\quad}$$

$$(+5) - (-8) = \underline{\quad}$$

$$(+4) - (+7) = \underline{\quad}$$

Multiplication (Same Signs (+) & Different Signs (-))

Multiply then If Signs are the Same then Result is (+)!

Multiply then If Signs are Different then Result is (-)!

$$(-4) \times (-8) = \underline{\quad}$$

$$(-4) \times (+6) = \underline{\quad}$$

$$(+2) \times (+9) = \underline{\quad}$$

$$(+2) \times (-7) = \underline{\quad}$$

$$(-5) \times (+6) = \underline{\quad}$$

$$(-5) \times (-9) = \underline{\quad}$$

$$(+3) \times (-7) = \underline{\quad}$$

$$(+2) \times (+8) = \underline{\quad}$$

Division (Same Signs (+) & Different Signs (-))

Divide then If Signs are the Same then Result is (+)! Divide then If Signs are Different then Result is (-)!

$$(-18) \div (-2) = \underline{\quad}$$

$$(-24) \div (+6) = \underline{\quad}$$

$$(+15) \div (+3) = \underline{\quad}$$

$$(+12) \div (-3) = \underline{\quad}$$

$$(-12) \div (+4) = \underline{\quad}$$

$$(-24) \div (-8) = \underline{\quad}$$

$$(+20) \div (-5) = \underline{\quad}$$

$$(+18) \div (+9) = \underline{\quad}$$

Beginning Numbers * Grouped Integers 1 D

Fundamental Operations: Addition, Subtraction, Multiplication, Division with Integers

Principle (Rule) of Signs: $(+3) = + + +$ $(-4) = - - - -$ $(+5) = + + + + +$ $(-2) = - -$

Principle of Opposites: $(+3)+(-3) = 0$ $(-4)+(+4) = 0$ $(+5)+(-2) = +3$ $(+3)+(-7) = -4$

Addition (Combining of Signs!)

Same Signs => Combine Values then Common Sign! Different Signs => Cancel Values then Sign of Result!

$$(-4) + (-5) = \underline{\quad}$$

$$(-4) + (+9) = \underline{\quad}$$

$$(+2) + (+6) = \underline{\quad}$$

$$(+2) + (-7) = \underline{\quad}$$

$$(-5) + (+8) = \underline{\quad}$$

$$(-5) + (-6) = \underline{\quad}$$

$$(+3) + (-7) = \underline{\quad}$$

$$(+4) + (+8) = \underline{\quad}$$

Subtraction (Add the Opposite!)

Change Subtraction to Addition then Change Sign of Second Number to Opposite Sign then Combine!

$$(-2) - (-9) = \underline{\quad}$$

$$(-3) - (+7) = \underline{\quad}$$

$$(+3) - (+7) = \underline{\quad}$$

$$(+2) - (-8) = \underline{\quad}$$

$$(-4) - (+6) = \underline{\quad}$$

$$(-5) - (-5) = \underline{\quad}$$

$$(+5) - (-5) = \underline{\quad}$$

$$(+4) - (+6) = \underline{\quad}$$

Multiplication (Same Signs (+) & Different Signs (-))

Multiply then If Signs are the Same then Result is (+)!

Multiply then If Signs are Different then Result is (-)!

$$(-4) \times (-7) = \underline{\quad}$$

$$(-4) \times (+7) = \underline{\quad}$$

$$(+2) \times (+8) = \underline{\quad}$$

$$(+2) \times (-9) = \underline{\quad}$$

$$(-5) \times (+9) = \underline{\quad}$$

$$(-5) \times (-8) = \underline{\quad}$$

$$(+3) \times (-6) = \underline{\quad}$$

$$(+2) \times (+6) = \underline{\quad}$$

Division (Same Signs (+) & Different Signs (-))

Divide then If Signs are the Same then Result is (+)! Divide then If Signs are Different then Result is (-)!

$$(-14) \div (-2) = \underline{\quad}$$

$$(-19) \div (+8) = \underline{\quad}$$

$$(+15) \div (+3) = \underline{\quad}$$

$$(+10) \div (-5) = \underline{\quad}$$

$$(-20) \div (+4) = \underline{\quad}$$

$$(-24) \div (-6) = \underline{\quad}$$

$$(+15) \div (-5) = \underline{\quad}$$

$$(+35) \div (+7) = \underline{\quad}$$