



# Teacher Guide

Our resource has been created for ease of use by both **TEACHERS** and **STUDENTS** alike.

## Introduction

**T**he NCTM content standards have been used in the creation of the assignments in this booklet. This method promotes the idea that it is beneficial to learn through practical, applicable, real-world examples. Many of the drill sheets are organized around a central problem taken from real-life experiences of the students. The pages of this booklet contain a variety in terms of levels of difficulty and content so as to provide students with a variety of different opportunities. Included are questions involving patterning, evaluating algebraic expressions, utilizing number lines and graphs, mathematical sentences and algebraic properties. Visual models are included to assist visual learners. Teachers may also choose to use mathematics manipulatives along with the exercises included in this book to help address the needs of kinesthetic learners.



Contained in this booklet are 11 Timed Drill Sheets and 6 Warm-Up Drill Sheets, featuring real-life problem-solving opportunities, and 3 review sheets for grades 3-5. Also, there are 3 overheads and 6 additional worksheets which can be accessed on the publisher's website.

The NCTM Content Standards Assessment Rubric (page 4) is a useful tool for evaluating students' work in many of the activities in our resource. The **Reviews** (pages 24-26) are divided by grade and can be used for a follow-up review or assessment at the completion of the unit.

## PICTURE CUES

Our resource contains three main types of pages, each with a different purpose and use. A **Picture Cue** at the top of each page shows, at a glance, what the page is for.



### Teacher Guide

- \* Information and tools for the teacher



### Student Handout

- \* Reproduces the drill sheets



### Easy Marking™ Answer Key

- \* Answers for student activities



### Timed Drill Stopwatch

- \* Write the amount of time for students to complete the timed drill sheet in the stopwatch. Recommended times are given on the contents page.

## How Is Our Resource Organized?

### STUDENT HANDOUTS

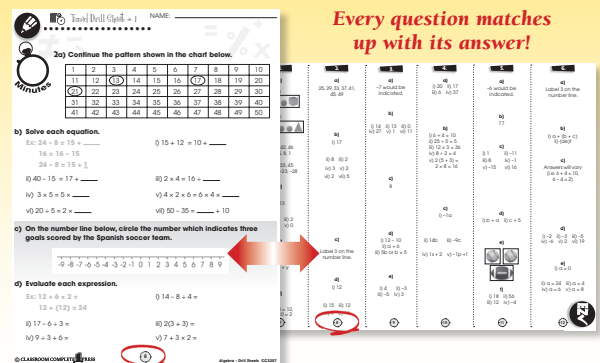
Reproducible **drill sheets** make up the majority of our resource.

The **drill sheets** contain challenging problem-solving tasks in drill form, many centered around 'real-world' ideas or problems, which push the boundaries of critical thought and demonstrate to students why mathematics is important and applicable in the real world. It is not expected that all activities will be used, but are offered for variety and flexibility in teaching and assessment. Many of the drill sheet problems offer space for reflection, and opportunity for the appropriate use of technology, as encouraged by the NCTM's *Principles & Standards for School Mathematics*.

The **drill sheets** workbook can be used in correlation with the separate **task sheets** workbook that matches with this particular grade and subject.

## EASY MARKING™ ANSWER KEY

Marking students' worksheets is fast and easy with our **Answer Key**. Answers are listed in columns – just line up the column with its corresponding worksheet, as shown, and see how every question matches up with its answer!



Every question matches up with its answer!

NAME: \_\_\_\_\_



**10a) Solve the following equations:**

i)  $2^2 =$

ii)  $3^3 =$

iii)  $6 + 6^2 =$

iv)  $3^2 + 4^2 =$

v)  $12 + (2^2 + 8) =$



**b) What value, when placed in the box, would make the following equation true?**

$$7 \times \boxed{\phantom{00}} - 10 = 45 + 8$$

**c) The following pattern increases by obeying this rule: *multiply the previous term by 2 and add 3.* 6, 15, 33, 69, ...  
What is the next term in the sequence?**

**d) Find each quotient.**

i)  $24 \div -6 =$

ii)  $-15 \div 5 =$

iii)  $-7 \div 2 =$

iv)  $-14 \div 2 =$

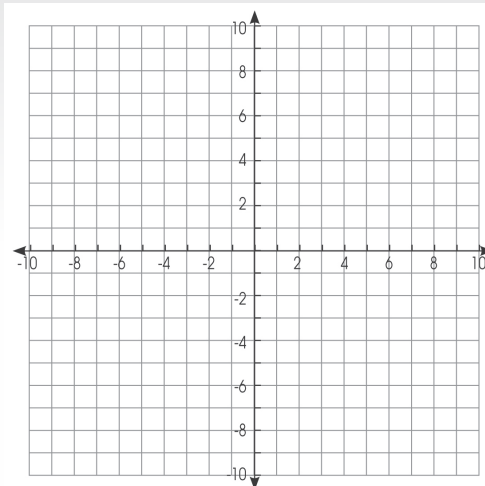
**e) Plot the following coordinates on the accompanying grid:**

A = (-8, 8)

B = (0, 0)

C = (6, -7)

D = (8, 9)





# Review C

## a) Evaluate each expression.

i)  $11 + 7 \times 3 =$

ii)  $16 - 12 \div 3 =$

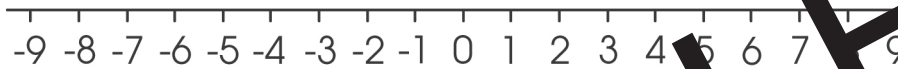
iii)  $10 \times 6 \div 3 =$

iv)  $9(6 + 7) =$

v)  $11 + 2(7 - 3)^2 =$

vi)  $(9 + 8 + 12 - 4) \div 5 =$

## b) Graph $a \leq 5$ on the number line.



## c) Solve for x.

i)  $8 + (x + 4) = 24,$

$x =$

ii)  $x + 4^2 = 21,$

$x =$

iii)  $12 \div x = 3,$

$x =$

iv)  $2(6 - x) = 8,$

$x =$

## d) If $y = 4$ , solve these equations.

i)  $y + 12 =$

ii)  $y(6 \times 2) - 4^2 =$

## e) Write the missing numbers in the following patterns.

i) 99, 92, 85, \_\_\_\_\_, \_\_\_\_\_, 64

ii) -14, \_\_\_\_\_, -40, \_\_\_\_\_, \_\_\_\_\_

## f) Write each as an algebraic expression.

i) Difference of 44 and 11

\_\_\_\_\_

ii)  $a$  increased by 22

\_\_\_\_\_

# Plotting, Equations and Input-Output



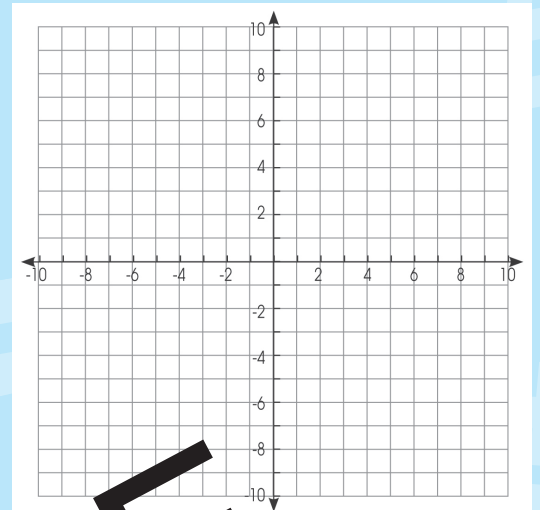
a) Plot the following coordinates on the accompanying grid:

A = (\_\_, \_\_)

B = (\_\_, \_\_)

C = (\_\_, \_\_)

D = (\_\_, \_\_)



b) Solve the following

i)  ×  =

ii)  -  =

iii)  -  =

c) Examine the input output table shown below.

Input	Output

Which rule describes the data?

Answer: \_\_\_\_\_