

Chapter 1 Review

1.1 Evaluate Expressions

Input values and simplify

Exponents -5^2 vs $(-5)^2$

1.2 Order of Operations

PEMDAS- Go left to right when MD or AS

Evaluate- Plug in and then simplify using PEMDAS

1.3 Writing Expressions

Translate a verbal phrase into an expression

Write an expression given a situation

Find unit rate

1.4 Write Equations and Inequalities

Translate a verbal phrase into an equation

Translate a verbal phrase into an inequality

Check if a value is a solution to an equation or inequality

1.6 Represent Functions as Rules and Tables

Identify domain and range of a function

Tell whether the pairing is a function

Make a table given a rule and domain

Write a rule given a table

1.7 Represent Functions as Graphs

Graph a function given a rule and domain

Create a table and write a rule given a graph

1.1 Evaluating Expressions

Input the value and simplify

1) $3x$ when $x = \frac{1}{2}$

2) $\frac{g}{3}$ when $g = 5$

3) x^2 when $x = -7$

4) $-x^2$ when $x = 8$

1.2 Order of Operations and Evaluating Expressions

Input the values and simplify using order of operations

5) $11(6 - x)^2 - 10$ when $x = 3$

6) $\frac{(x+5)-2}{2(8-y)^3}$ when $x = 3$ and $y = 6$

1.3 Writing Expressions

Translate the verbal phrase into an expression

7) 7 less than a number

8) The quotient of a number and 3

9) 5 times the sum of 9 and x

10) 7 more than the product of 8 and a number

11) The difference of 4 and a number

Write an expression for the situation

12) The number of months in y years

13) The amount of m money you get if 4 people share it.

14) The number of games you can play if you have d dollars if each game costs \$0.75

Find the unit rate

15) \$36.75 for 5 books

16) 445 yards in 4 games.

1.4 Writing Equations and Inequalities

Write an equation or inequality for each phrase below.

17) The sum of a number and 8 is at most 12.

18) The product of 2 and w is 12.

19) 3 times the sum of 7 and a number is no less than 15.

Check whether the given number is a solution of the equation or inequality.

20) $3x + 7 > 20$ for $x = 4$

21) $2p - 1 \leq 7$ for $p = 3$

1.6 Represent Functions as Rules and Tables

Identify the domain and range of the function.

22)

Input	2	4	6	8	10
Output	3	6	9	12	15

Tell whether the pairing is a function.

23)

x	2	3	2	5
y	8	6	4	2

24)

x	4	5	6	7
y	3	3	5	9

Make a table for the function $y = 2x + 3$ with a domain of 0,1,2,3. Then identify the range.

25)

input				
output				

Write a rule for the function.

26)

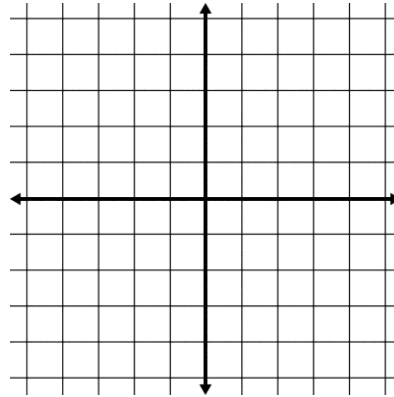
x	2	4	6	8	10
y	0	4	8	12	16

1.7 Represent Functions as Graphs

Graph the function.

27) $y = 3x - 2$ domain: 0,1,2,3

input				
output				



Write a rule for the function represented by the graph. Identify the domain and range of the function.

28)

