142 • Expressions and Equations

Evaluate $2 + 3(5^3)$.

a) 79

b) 127

c) 377

168 • Expressions and Equations

Which expression is equivalent to $15x$?

a) $30x - 23x + 8x$

b) $\frac{30}{3x}$

c) $4x + 5x + 18x$

170 • Expressions and Equations

Which answer is the solution to $\frac{100}{x} = 20$?

a) 5

b) 8

c) 10

196 • Expressions and Equations

Beth earns $8.25 per hour at her after-school job. The number of hours she works each week varies. Which ordered pairs represent the amount of money she will earn if she works 10, 15, or 20 hours per week?

a) (10, 15); (20, 25); (30, 35)

b) (10, $82.50); (15, $123.75); (20, $165)
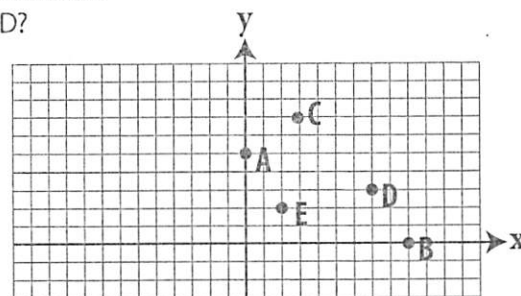
c) (10, $8.25); (15, $8.25); (20, $8.25)

102 • The Number System

What is the coordinate pair for point D?

a) (3, 7)

b) (-7, 3)

c) (7, 3)

152 • Expressions and Equations

Which answer describes the expression $3(5 + 2)$?

a) the quotient of 3 and the sum of 5 and 2

b) the product of 3 and the sum of 5 and 2

c) the product of 3 and the difference of 5 and 2

190 • Expressions and Equations

Ling has $25 in her bank account. She wants to buy a bracelet. Which inequality calculates the amount Ling can spend (s) on her bracelet and keep her bank account balance at $0 and above?

a) $25s \geq 0$

b) $25 + s \leq 0$

c) $25 - s \geq 0$

Complete each table and write the algebraic equation rule for each table.

8.

Input (x)	Output (y)
8	2
16	4
24	
36	9

_____

9.

Input (x)	Output (y)
1	17
9	25
14	
	38

_____

10.

Input (x)	Output (y)
	42
8	56
11	77
12	

_____

11.

x	9	12			
y	5	8	15	21	25

_____

12.

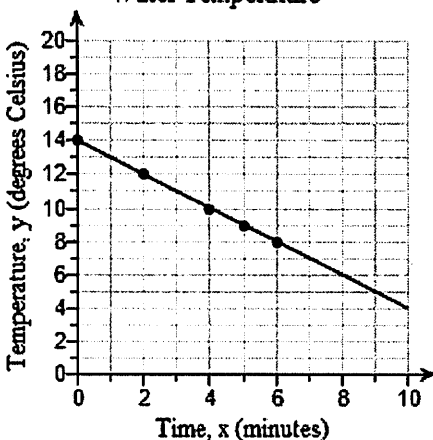| x	16	48	56		
y	2	6		10	12

_____

13. It costs $8 for a ticket to go to the pottery painting studio. It costs an additional $4 for each pice of pottery you paint.

Write an equation that shows the relationship between the number of pieces you paint p, and the total cost, T.

Potter Painting Studio Costs		
Painted Pieces	Cost of Studio Fee and Painted Pieces	Total Cost ($)
1	$8+4(1)$	
2		16
		24
7		
		48

_____

14. Shira put a glass of water in a refrigerator. The graph shows the water's temperature after x minutes. Use the graph to complete the table of values for x and y.

Water Temperature

Time (x)	Temp. (y)

Write an equation that represents the relationship between x and y.

_____