



Warm Up

Grade 7



show work

Simplify FIRST THEN Evaluate by replacing m with 8 and k with 3.

a) $3m + 7k - 4m + 3k$

$$7k + 3k + 3m - 4m$$

$$10k - 1m$$

$$10(3) - 1(8)$$

$$30 - 8$$

$$\boxed{22}$$

b) $11k - 6m - 2m + 5$

$$11k - 8m + 5$$

$$11(3) - 8(8) + 5$$

$$33 - 64 + 5$$

$$\boxed{-26}$$

c) $52 - 2m - 3k$

$$52 - 2(8) - 3(3)$$

$$52 - 16 - 9$$

$$\boxed{27}$$



Warm Up

Grade 7



Simplify FIRST THEN Evaluate by replacing m with 8 and k with 3. show work

a) $3m + 7k - 4m + 3k$

$$3m - 4m + 7k + 3k$$

$$-1m + 10k$$

$$-1(8) + 10(3)$$

$$-8 + 30$$

$$22$$

$$22$$

b) $11k - 6m - 2m + 5$

$$11k - 8m + 5$$

$$11(3) - 8(8) + 5$$

$$33 - 64 + 5$$

$$-26$$

c) $52 - 2m - 3k$

$$52 - 2(8) - 3(3)$$

$$52 - 16 - 9$$

$$27$$

Homework

Grade 7 Worksheet #2

Name _____

Assignment Combining Like Terms Solutions

Date _____

Simplify each expression.

1) $3x + 8x + x + x + x + 2 + 5$

$$14x + 7$$

3) $2m + 6m + 8z + 7m + 2z + 9k$

$$2m + 6m + 7m + 8z + 2z + 9k \\ 15m + 10z + 9k$$

5) $1 + 9x + 1 + 10x$

$$19x + 2$$

7) $6r - 2r + 7 + 5$

$$4r + 12$$

9) $10x + 3 + x + 8$

$$11x + 11$$

11) $9n + 3b + n + b + 3b + 2n$

$$12n + 7b$$

13) $x + 7 + x - 3$

$$x + x + 7 - 3 \\ 2x + 4$$

15) $23m - 8m + 7k + 2k$

$$15m + 9k$$

17) $8n + 10m + m + 2m + n + m + 2n$

$$11n + 14m$$

19) $x + 7x$

$$8x$$

2) $20n + 4y + 9y + 7n$

$$20n + 7n + 4y + 9y \\ 27n + 13y$$

4) $19 + 6p + 9p + 3$

$$22 + 15p$$

6) $3b - 10 + 3b$

$$6b - 10$$

8) $6n + 4n + 5 + 10 + 3 + n + n$

$$12n + 18$$

10) $6n - 1n$

$$5n$$

12) $8 + v + 1$

$$v + 9$$

14) $7k + 8 + 7$

$$7k + 15$$

16) $5 + 4n + 7 + 5n$

$$9n + 12$$

18) $8v - 4v + 2v + 6v + 10$

$$12v + 10$$

20) $7 + 9n + 7$

$$9n + 14$$

Homework Solutions

Combine like terms then evaluate each using the values given. (SHOW WORK)

21) $3k + 6k$; use $k = 4$

$$\begin{aligned} &9k \\ &9 \times 4 \\ &36 \end{aligned}$$

22) $5n + 10n + 2n$; use $n = 3$

$$\begin{aligned} &17n \\ &17 \times 3 = 51 \end{aligned}$$

23) $2g + 4c + 8g + 3c$; use $g = 5$, and $c = 2$

$$\begin{aligned} &2g + 8g + 4c + 3c \\ &10g + 7c \\ &10(5) + 7(2) \\ &50 + 14 \\ &64 \end{aligned}$$

24) $2z + y + 4z + 5y + y + 8z$; use $z = 7$, and $y = 3$

$$\begin{aligned} &2z + 4z + 8z + y + 5y + y \\ &14z + 7y \\ &14(7) + 7(3) \\ &98 + 21 \\ &119 \end{aligned}$$

25) $6s + 9y + 9j + 2s + 10$; use $s = 2$, $y = 6$ and $j = 3$

$$\begin{aligned} &6s + 2s + 9y + 9j + 10 \\ &8s + 9y + 9j + 10 \\ &8(2) + 9(6) + 9(3) + 10 \\ &16 + 54 + 27 + 10 \\ &107 \end{aligned}$$

26) $x + 3y + 6y + 7x + 2y + 10x$; use $x = 2$, and $y = 3$

$$\begin{aligned} &18x + 11y \\ &18(2) + 11(3) \\ &36 + 33 \\ &69 \end{aligned}$$

Grade 7 combine like terms sheet
Simplify and evaluate

Name: _____

1. $10x + 2 - 5 - 8x - 4$, for $x = 5$

$$\begin{aligned} & 10x - 8x + 2 - 5 - 4 \\ & 2x - 7 \\ & 2(5) - 7 \\ & 10 - 7 \\ & 3 \end{aligned}$$

2) $3a + 7 + 6 + 2a$, for $a = 3$

$$\begin{aligned} & 3a + 2a + 7 + 6 \\ & 5a + 13 \\ & 5(3) + 13 \\ & 15 + 13 \\ & 28 \end{aligned}$$

3) $3m - 15 + m$, for $m = 9$

$$\begin{aligned} & 3m + m - 15 \\ & 4m - 15 \\ & 4(9) - 15 \\ & 36 - 15 \\ & 21 \end{aligned}$$

4) $2w + 10 - 7w - 8 + 3w - 7$, for $w = 3$

$$\begin{aligned} & 2w - 7w + 3w + 10 - 8 - 7 \\ & -2w - 5 \\ & -2(3) - 5 \\ & -6 - 5 = \boxed{-11} \end{aligned}$$

5) $8c - 4 - 2c + 5$, for $c = 7$

$$\begin{aligned} & 8c - 2c - 4 + 5 \\ & 6c + 1 \\ & 6(7) + 1 \\ & 42 + 1 \\ & 43 \end{aligned}$$

6) $12n - 8 - 2n + 10 - 4$, for $n = 6$

$$\begin{aligned} & 12n - 2n - 8 + 10 - 4 \\ & 10n - 2 \\ & 10(6) - 2 \\ & 60 - 2 \\ & 58 \end{aligned}$$

7) $15x + 7y - 3y - 4x + 3x + 10$, for $x = 2$ and $y = 7$

$$\begin{aligned} & 15x - 4x + 3x + 7y - 3y + 10 \\ & 14x + 4y + 10 \\ & 14(2) + 4(7) + 10 \\ & 28 + 28 + 10 = \boxed{56} \end{aligned}$$

8) $8k + 14 - 5k + 4k + 2r + 5$, for $k = 4$ and $r = 2$

$$\begin{aligned} & 8k - 5k + 4k + 2r + 14 + 5 \\ & 7k + 2r + 19 \\ & 7(4) + 2(2) + 19 \\ & 28 + 4 + 19 \\ & \boxed{51} \end{aligned}$$

9) $9p + 3q - 2p - 3q$, for $p = 3$ and $q = 9$

$$\begin{aligned} & 9p - 2p + 3q - 3q \\ & 7p + 0q \\ & 7(3) + 0 \\ & \boxed{21} \end{aligned}$$

10) $6u + 9v + u + 3v$, for $u = 7$ and $v = 4$

$$\begin{aligned} & 6u + u + 9v + 3v \\ & 7u + 12v \\ & 7(7) + 12(4) \\ & 49 + 48 \\ & \boxed{97} \end{aligned}$$

Name: _____

Unit 1 Worksheet 1
Combining Like terms

1. Simplify the following:

(a) $4v + 7v$

(b) $5n + 8n - 4n$

(c) $9g - 4g$

(d) $3a + 5 + 8 + 6a$
 $\quad \quad \quad \underline{11v}$
 $\quad \quad \quad \underline{9a + 13}$

(e) $7 + 4b + 6 + 3b$
 $\quad \quad \quad \underline{9n}$

(f) $10f + 8 - 7f + 9$

(g) $3d + 9c - 2d + 2c + 6d$

(h) $4s + 12 - 3 + 8s - 5 + 3s$

(i) $4r + 7w + 8r + w + r$

(j) $16 + h + 4h - 7 - 2h + h$

(k) $m + m + m + m$

(l) $4 + y + 2 + 2y + y + 1$

(m) $20u + 7 + 8 - 3u + 7v$

(n) $b + f + 2f + 3b + f + 4b$

(o) $3e + 7t + 5 + 4t + 8$

(p) $3x + 6y + 3x - 4y - 9$

(q) $9j - 7 + 4j + 10$

(r) $3x + 7y + 2xy + 4xy + 5x$

(s) $6h + 9b - 5h + 4b + 2h$

(t) $9a + 6b + 3ab + 4b + 2ab + a$

(u) $7u + 7uv + 8u - 2uv + 9 - 6u - 8$

2. Simplify the following, then evaluate with the given values.

(a) $4a + 8 - a + 6$, $a = 5$

(b) $3g - 2g + h + g - 7$, $g = 10$, $h = 3$

(c) $5s + 2t + s + t - 7$, $s = 2$, $t = 9$

(d) $x + y + 3 + 2x + 5y + 6x$, $x = -1$, $y = 4$

(e) $2a + 6ab - a + b + 3ab$, $a = 6$, $b = 10$

(f) $7k + 8 - 4 - 3k + 6 + k$, $k = 8$

3) Which of these numbers is 37 656 divisible by? Explain how you know WITHOUT a calculator. (Do on your own paper)

- a) 2 b) 3 c) 4 d) 5 e) 6 f) 8 g) 9 h) 10

4) Use digits 0 to 9. Replace the ___ in each number to make it divisible by 3.

Find as many answers as you can.

- a) 5_9 b) 7 _621

5) Use digits 0 to 9. Replace the ___ in each number to make it divisible by 4.

Find as many answers as you can.

- a) 1 54__ b) 12 _16 c) 2_0

6) In each of the following state the coefficient, constant, variable and what operations are in the expression.

a) $12k - 7$

Coefficient: _____

Constant: _____

Variable: _____

Op: _____

b) $5 + 8p$

Coefficient: _____

Constant: _____

Variable: _____

Op: _____

c) $m - 13$

Coefficient: _____

Constant: _____

Variable: _____

Op: _____

d) $6t$

Coefficient: _____

Constant: _____

Variable: _____

Op: _____

e) $72/h$

Coefficient: _____

Constant: _____

Variable: _____

Op: _____

7) Write the above expressions into a phrase.

Class/Homework

Previous slides

#1 (A TO U)

all

#2(A TO F)

2a

AND

#6(A TO E)

6a

#7(A,C)

Extra Practice 3

ALL QUESTIONS

Attachments

Oct. 4 Grade 7 Extra Prctice Worksheet 3 (Homework SHEET).pdf

Gr 7 U1 pat day 4 collect like terms weorksheet.docx