

STATION 1

Evaluate the following expressions if $r = 4$, $h = 7$, $c = 2$

1 $11(h + c) - 14$

2 $r^2 + c(15 - h)$

3 $\frac{hc + 22}{r}$

4 $9r + 7h - c^2$

STATION 2

Look at each of the three problems below and determine if they were solved correctly. Make any corrections necessary.

A

$$\begin{array}{r} (21 - 17) + 3 \cdot 7 \\ \hline 5 \\ 4 + 3 \cdot 7 \\ \hline 5 \\ 7 \cdot 7 \\ \hline 5 \\ \hline 9\frac{4}{5} \end{array}$$

C $10^2 + (4 + 2)^2 \cdot 5$

$$\begin{array}{r} 100 + 16 + 4 \cdot 5 \\ 100 + 16 + 20 \\ \hline 136 \end{array}$$

B $(6^2 - 16) + 24$

$$\begin{array}{r} (36 - 16) + 24 \\ 20 + 24 \\ \hline 44 \end{array}$$

STATION 3

A A meal at Pizzeria Plaza costs \$2 per slice of pizza plus \$1.75 for a drink.

Define a variable: _____

Cost of a meal with s slices of pizza _____

Cost of a meal with 3 slices of pizza _____

B Jorge has \$740 in his bank account. Each month he has to withdraw \$27 to pay for his cell phone.

Define a variable: _____

Amount in his account after m months: _____

Amount in his account after 8 months: _____

STATION 4

Use your understanding of exponent form, expanded form, and standard form to complete the following table

exponent form	expanded form	STANDARD form
	$4 \cdot 4 \cdot 4 \cdot 4 \cdot 4$	
		81
$2^3 6^2$		
8^1		
	$5 \cdot 2 \cdot 5 \cdot 2 \cdot 2 \cdot 2$	
$9 \cdot 7^3$		

STATION 5

Write an expression for the following situations.

A) one-half a number plus 10	
B) 6 times a number less 2	
C) p squared divided by 8	
D) 60 times the number of hours	
E) twice the width less 3	
F) temperature decreased 13 degrees	

STATION 6

Set a timer for 4 minutes. Write equivalent expressions for as many problems as you can before the time is up.

¹ $4(x + 3)$	² $2(5x - 1)$	³ $6(4x - 2)$	⁴ $5 - (x - 12)$
⁵ $12 \cdot 5 \cdot 7$	⁶ $4 \cdot 10 \cdot 3$	⁷ $(15 + 6) + 2$	⁸ $2(11 + 3)$
⁹ $9 + (x - 3)$	¹⁰ $3(2x + 1)$	¹¹ $(7 + 10) + x$	¹² $4 - (2 - 2x)$

STATION 1

Create a problem and then apply the given property to complete the table below. An example is provided in the first row.

PROPERTY	PROBLEM	APPLY THE PROPERTY
Commutative Property of Addition	$5 + s$	$s + 5$
Additive Identity Property	1a)	1b)
Multiplicative Identity Property	2a)	2b)
Commutative Property of Multiplication	3a)	3b)
Zero Product Property	4a)	4b)
Additive Inverse Property	5a)	5b)
Multiplicative Inverse Property	6a)	6b)

STATION 8

Label each of the parts of the expression using the terms provided in the word bank.

$$8^2 - 6x - 2 + x + 7y$$

[WORD BANK]

- Base
- Coefficient
- Expression
- Constant
- Operation
- Variable
- Term
- Exponent

expressions Unit Review

Answer each question in the appropriate box. Be sure to show your work.

Station 1

1. _____

2. _____

3. _____

4. _____

Station 2

A. _____

B. _____

C. _____

Station 3

A

Define a variable: _____

Cost of the meal with s slices of pizza: _____

Cost of a meal with 3 slices _____

B

Define a variable: _____

Amount in his account after m months: _____

Amount in his account after 8 months: _____

Station 4

exponent form	expanded form	standard form
	$4 \cdot 4 \cdot 4 \cdot 4 \cdot 4$	
		81
$2^3 6^2$		
8^1		
	$5 \cdot 2 \cdot 5 \cdot 2 \cdot 2 \cdot 2$	
$9 \cdot 7^3$		

Answer each question in the appropriate box. Be sure to show your work.

Station 5

- A. _____
- B. _____
- C. _____
- D. _____
- E. _____
- F. _____

Station 6

1	2	3	4
5	6	7	8
9	10	11	12

Station 7

PROBLEM	APPLY THE PROPERTY
$5 + s$	$s + 5$
1a)	1b)
2a)	2b)
3a)	3b)
4a)	4b)
5a)	5b)
6a)	6b)

Station 8

[LABEL the expression]

$$8^2 - 6x - 2 + x + 7y$$

expressions Unit Review

Answer each question in the appropriate box. Be sure to show your work.

Station 1

1. 85
2. 32
3. 9
4. 81

Station 2

- A. 5
- B. correct
- C. 280

Station 3

A

Define a variable: $s = \# \text{ of slices of pizza}$

Cost of the meal with s slices of pizza: $2s + 1.75$

Cost of a meal with 3 slices $\$7.75$

B

Define a variable: $m = \# \text{ of months}$

Amount in his account after m months: $740 - 27m$

Amount in his account after 8 months: $\$524$

Station 4

exponent form	expanded form	standard form
4^5	$4 \cdot 4 \cdot 4 \cdot 4 \cdot 4$	<u>1,024</u>
3^4	$3 \cdot 3 \cdot 3 \cdot 3$	<u>81</u>
$2^3 6^2$	$2 \cdot 2 \cdot 2 \cdot 6 \cdot 6$	<u>288</u>
8^1	<u>8</u>	<u>8</u>
$5^2 2^4$	$5 \cdot 2 \cdot 5 \cdot 2 \cdot 2 \cdot 2$	<u>400</u>
$9 \cdot 7^3$	$9 \cdot 7 \cdot 7 \cdot 7$	<u>3,087</u>

Answer each question in the appropriate box. Be sure to show your work.

Station 5

- A. $\frac{1}{2}x + 10$
- B. $6x - 2$
- C. $\frac{p^2}{8}$
- D. $60h$
- E. $2w - 3$
- F. $t - 13$

Station 6

* There are other possible equivalent expressions; answers may vary.

1 $4x + 12$	2 $10x - 2$	3 $24x - 12$	4 $17 - x$
5 $7 \cdot 5 \cdot 12$	6 $3 \cdot 10 \cdot 4$	7 $15 + (6 + 2)$	8 $2 \cdot 11 + 2 \cdot 3$
9 $x + 6$	10 $6x + 3$	11 $17 + x$	12 $2x + 2$

Station 7

PROBLEM	APPLY THE PROPERTY
$5 + s$	$s + 5$
1a) Answers vary	1b)
2a)	2b)
3a)	3b)
4a)	4b)
5a)	5b)
6a)	6b)

Station 8

[LABEL the expression]

