Introduction to Lesson 5

Lesson 5 reinforces content in the previous lessons and introduces exponents and degrees, including the superscript indicator, baseline indicator, and hollow dot. The Project INSPIRE team recommends that activities be completed in the order provided.

Activity 1: Symbol List

Directions: Review the Symbol List with the student before beginning the activities. If the student is not familiar with any symbol spend time introducing it and how it is used in math materials.

⠔   superscript indicator

⠐   baseline indicator or multipurpose indicator

⠘⠨⠡   degrees

Activity 2: Maze Answers

Directions: Have the student read each expression as they advance through the maze.

Start

5^2	five squared	�
$(6-3)^2$	open parenthesis six minus 3	
	close parenthesis squared	
x^3	x cubed	
$3y^2$	three y squared	
$30°$	thirty degrees	
2^4-3	two to the fourth power minus three	
x^2+y^4	x squared plus y to the fourth power	

$-82°$	negative eighty-two degrees
$4y^2 + 7$	four y squared plus seven

Finish

Activity 3: What is Wrong?

Directions: Have the student read the expressions in each of the four quadrants. What is wrong with each of the first three expressions? It is a common mistake. The last choice is always correct. There is also a challenge puzzle that has two mistakes.

Three squared plus four squared

⠼⠒⠰⠔⠬⠼⠲⠰⠔	⠼⠒⠰⠔⠬⠼⠲⠰⠔
⠼⠒⠰⠔⠬⠼⠲⠰⠔	⠼⠒⠰⠔⠬⠼⠲⠰⠔

Challenge (Find two mistakes.)

Eight plus open parenthesis seven minus four cubed close parenthesis

⠼⠓⠬⠣⠼⠶⠤⠼⠲⠰⠬⠼⠒⠜

Activity 4: Which One Doesn't Belong?

Directions: Have the student read the expression in each of the four quadrants and share their reasoning as to "Which One Doesn't Belong and Why?" The great thing about this activity is that there are no wrong answers. As long as the student's reasoning is accurate, they are correct.

Note: Be sure to watch the video Sara Larkin created that explains how to facilitate the "Which One Doesn't Belong?" activity.

1.

$27x^2$	$3x^2$
$46x^2$	$9x^3$

2.

$(-2)^4$	-2^4
2^{-4}	$4^{\frac{1}{2}}$

Activity 5: What is the Question?

Directions: Now is the student's chance to be creative! The student will be given the answer and needs to come up with a question which gives them that answer. There is an example of a question to get them started, but they must come up with their own. Challenge the student to use as many different symbols as they can!

Answer: $32°F$

Question example: The temperature $40°$ lower than $72°F$

Your question that gives the same answer: