MULTIPLYING METHODS: DISTRIBUTIVE PROPERTY

# Recognizing Patterns

Below are 4 different expanded expressions. What do they have in common?

|  |  |
| --- | --- |
|  |  |
|  |  |

# Verbalizing

Generalize what you observed above. Explain what is happening in the pattern you see.

# Applying

Use your generalization to multiply: (*x* **–** 2) (*x*2 **+** 5*x* **–** 3).

MULTIPLYING METHODS: BOX METHOD

# Recognizing Patterns

Below are 4 different expanded expressions. What do they have in common?

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  | | --- | --- | --- | |  | *x* | + 2 | | *x* | x2 | + 2x | | + 3 | + 3x | + 6 | | |  |  |  | | --- | --- | --- | |  | *x* | – 2 | | *x* | x2 | – 2x | | – 3 | – 3x | + 6 | |
| |  |  |  | | --- | --- | --- | |  | *x* | + 2 | | *x* | x2 | + 2x | | – 3 | – 3x | – 6 | | |  |  |  | | --- | --- | --- | |  | *x* | – 2 | | *x* | x2 | – 2x | | + 3 | + 3x | – 6 | |

# Verbalizing

Generalize what you observed above. Explain what is happening in the pattern you see.

# Applying

Use your generalization to multiply: (*x* **–** 2) (*x*2 **+** 5*x* **–** 3).

MULTIPLYING METHODS: VERTICAL (STANDARD) MULTIPLICATION

# Recognizing Patterns

Below are 4 different expanded expressions. What do they have in common?

|  |  |
| --- | --- |
|  |  |
|  |  |

# Verbalizing

Generalize what you observed above. Explain what is happening in the pattern you see.

# Applying

Use your generalization to multiply: (*x* **–** 2) (*x*2 **+** 5*x* **–** 3).

MULTIPLYING METHODS: GEOMETRIC AREA (ALGEBRA TILES)

# Recognizing Patterns

Below are 4 different expanded expressions. What do they have in common?

|  |  |
| --- | --- |
|  |  |
|  |  |

# Verbalizing

Generalize what you observed above. Explain what is happening in the pattern you see.

# Applying

Use your generalization to multiply: (*x* **–** 2) (*x*2 **+** 5*x* **–** 3).