**Exponential Form**

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| **Vocabulary** | **Labeled Example** |
| Base |  |  |
| Exponent |  |
| Expression |  |
| Equivalent |  |

**Write each of these expressions in exponential form.**

1. $3∙3∙3∙3∙3∙3∙3∙3$
2. $\left(-6\right)∙\left(-6\right)∙(-6)$
3. $x∙x∙x∙x∙x$
4. **9**

**Determine the value of each of these expressions.**

1. $2^{4}$
2. $(-3)^{2}$
3. $-3^{2}$
4. $n^{6}$ **for n = 5**

**Simplify each expression.**

1. $(7^{3}-4)+3^{5}$
2. $18-3^{2}∙6$

**Application**

To find the sum of the first *n* positive numbers you can use the formula $\frac{1}{2}\left(n^{2}+n\right)$

What is the sum of the first 7 positive numbers?

What is the sum of the first 30 positive numbers?