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BLM 3–2

Section 3.1 Extra Practice

1. Write each expression as a power. Then, evaluate.

	Power	Evaluate
a) 6×6	$6^{\square}$	_____
b) $4 \times 4 \times 4$	_____	_____
c) $9 \times 9 \times 9 \times 9 \times 9$	_____	_____
d) $2 \times 2 \times 2 \times 2 \times 2 \times 2$	_____	_____

2. Write each expression as a power. Identify the base and the exponent in each power. Then, evaluate. An example is done for you.

	Power	Base	Exponent	Evaluate
Example: $2 \times 2 \times 2 \times 2$	2^4	2	4	16
a) $5 \times 5 \times 5$	$5^{\square}$	5	_____	_____
b) $1 \times 1 \times 1 \times 1 \times 1 \times 1 \times 1$	_____	_____	_____	_____
c) $7 \times 7 \times 7 \times 7 \times 7 \times 7$	_____	_____	_____	_____
d) 305	_____	_____	_____	_____

3. Write each power as repeated multiplication. Then, evaluate.

	Repeated Multiplication	Evaluate
a) 6^3	_____	_____
b) 2^5	_____	_____
c) 3^4	_____	_____
d) 10^6	_____	_____

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4. Write each power as repeated multiplication. Then, evaluate.

		Repeated Multiplication	Evaluate
a)	$(-2)^4$	_____	_____
b)	-2^4	_____	_____
c)	$(-4)^3$	_____	_____
d)	-4^3	_____	_____
e)	$-(-6)^3$	_____	_____
f)	$-(-6)^4$	_____	_____

5. Complete the table.

Repeated Multiplication	Exponential Form	Value
a) $(-3) \times (-3) \times (-3) \times (-3)$		
b) $(-2) \times (-2) \times (-2) \times (-2) \times (-2)$		
c)	$(-6)^5$	
d)		-125

6. Write the powers in ascending order (least to greatest).

3^3 5^2 2^5 4^3 12^0

Evaluate each power.

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