## Unit 6 Lesson 13 Cumulative Practice Problems

1. Select **all** expressions that are equal to $3⋅3⋅3⋅3⋅3$.
	1. $3\boldcdot5$
	2. $3^{5}$
	3. $3^{4}\boldcdot3$
	4. $5\boldcdot3$
	5. $5^{3}$
2. Noah starts with 0 and then adds the number 5 four times. Diego starts with 1 and then multiplies by the number 5 four times. For each expression, decide whether it is equal to Noah’s result, Diego’s result, or neither.
	1. $4⋅5$
	2. $4+5$
	3. $4^{5}$
	4. $5^{4}$
3. Decide whether each equation is true or false, and explain how you know.
	1. $9⋅9⋅3=3^{5}$
	2. $7+7+7=3+3+3+3+3+3+3$
	3. $\frac{1}{7}⋅\frac{1}{7}⋅\frac{1}{7}=\frac{3}{7}$
	4. $4^{1}=4⋅1$
	5. $6+6+6=6^{3}$
	6. What is the area of a square with side lengths of $\frac{3}{5}$ units?
	7. What is the side length of a square with area $\frac{1}{16}$ square units?
	8. What is the volume of a cube with edge lengths of $\frac{2}{3}$ units?
	9. What is the edge length of a cube with volume $\frac{27}{64}$ cubic units?
4. Select **all** the expressions that represent the area of the shaded rectangle.
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	1. $3(10−c)$
	2. $3(c−10)$
	3. $10(c−3)$
	4. $10(3−c)$
	5. $30−3c$
	6. $30−10c$
* (From Unit 6, Lesson 10.)
1. A ticket at a movie theater costs $8.50. One night, the theater had $29,886 in ticket sales.
	1. Estimate about how many tickets the theater sold. Explain your reasoning.
	2. How many tickets did the theater sell? Explain your reasoning.
* (From Unit 5, Lesson 13.)
1. A fence is being built around a rectangular garden that is $8\frac{1}{2}$ feet by $6\frac{1}{3}$ feet. Fencing comes in panels. Each panel is $\frac{2}{3}$ of a foot wide. How many panels are needed? Explain or show your reasoning.
* (From Unit 4, Lesson 12.)



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