## Unit 7 Lesson 7 Cumulative Practice Problems

1. Write with a single exponent:
	1. $\frac{7^{6}}{7^{2}}$
	2. $(11^{4})^{5}$
	3. $4^{2}⋅4^{6}$
	4. $6⋅6^{8}$
	5. $(12^{2})^{7}$
	6. $\frac{3^{10}}{3}$
	7. $(0.173)^{9}⋅(0.173)^{2}$
	8. $\frac{0.87^{5}}{0.87^{3}}$
	9. $\frac{(\frac{5}{2})^{8}}{(\frac{5}{2})^{6}}$
2. Noah says that $2^{4}⋅3^{2}=6^{6}$. Tyler says that $2^{4}⋅4^{2}=16^{2}$.
	1. Do you agree with Noah? Explain or show your reasoning.
	2. Do you agree with Tyler? Explain or show your reasoning.
3. Make a sketch of a linear relationship with a slope of 4 and a negative $y$-intercept. Show how you know the slope is 4 and write an equation for the line.
* (From Unit 5, Lesson 7.)
1. Using the data in the scatter plot, what can you tell about the slope of a good model?
* 
	1. The slope is positive.
	2. The slope is zero.
	3. The slope is negative.
	4. There is no association.
* (From Unit 5, Lesson 21.)



© CC BY Open Up Resources. Adaptations CC BY IM.