### Lesson 7 Practice Problems

1. Write with a single exponent:
	1. $\frac{7^{6}}{7^{2}}$
	2. $\left(11^{4}\right)^{5}$
	3. $4^{2}⋅4^{6}$
	4. $6⋅6^{8}$
	5. $\left(12^{2}\right)^{7}$
	6. $\frac{3^{10}}{3}$
	7. $\left(0.173\right)^{9}⋅\left(0.173\right)^{2}$
	8. $\frac{0.87^{5}}{0.87^{3}}$
	9. $\frac{\left(\frac{5}{2}\right)^{8}}{\left(\frac{5}{2}\right)^{6}}$
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?
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	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.)



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