Lesson 16: Applying the Properties of Operations to Multiply and Divide Rational Numbers

Problem Set

1. Evaluate the expression $-2.2×\left(-2\right)÷\left(-\frac{1}{4}\right)×5$
	1. Using the order of operations only.
	2. Using the properties and methods used in Lesson 16.
	3. If you were asked to evaluate another expression, which method would you use, (a) or (b), and why?
2. Evaluate the expressions using the distributive property.
	1. $\left(2\frac{1}{4}\right)×\left(-8\right)$
	2. $\frac{2}{3}(-7)+\frac{2}{3}(-5)$
3. Mia evaluated the expression below but got an incorrect answer. Find Mia’s error(s), find the correct value of the expression, and explain how Mia could have avoided her error(s).

$$0.38×3÷\left(-\frac{1}{20}\right)×5÷\left(-8\right)$$

$$0.38×5×\left(\frac{1}{20}\right)×3×\left(-8\right)$$

$$0.38×\left(\frac{1}{4}\right)×3×\left(-8\right)$$

$$0.38×\left(\frac{1}{4}\right)×\left(-24\right)$$

$$0.38×\left(-6\right)$$

$$-2.28$$