## Unit 4 Lesson 7 Cumulative Practice Problems

1. For each expression, write an equivalent expression that uses only addition.
	1. $20−9+8−7$
	2. $4x−7y−5z+6$
	3. $-3x−8y−4−\frac{8}{7}z$
2. Use the distributive property to write an expression that is equivalent to each expression. If you get stuck, consider drawing boxes to help organize your work.
	1. $9(4x−3y−\frac{2}{3})$
	2. $-2(-6x+3y−1)$
	3. $\frac{1}{5}(20y−4x−13)$
	4. $8(-x−\frac{1}{2})$
	5. $-8(-x−\frac{3}{4}y+\frac{7}{2})$
3. Kiran wrote the expression $x−10$ for this number puzzle: “Pick a number, add -2, and multiply by 5.”
* Lin thinks Kiran made a mistake.
	1. How can she convince Kiran he made a mistake?
	2. What would be a correct expression for this number puzzle?
1. Solve each equation.
	1. $5(n−4)=-60$
	2. $-3t+-8=25$
	3. $7p−8=-22$
	4. $\frac{2}{5}(j+40)=-4$
	5. $4(w+1)=-6$
* (From Unit 3, Lesson 9.)
1. A map of a rectangular park has a length of 4 inches and a width of 6 inches. It uses a scale of 1 inch for every 30 miles.
	1. What is the actual area of the park? Show how you know.
	2. The map needs to be reproduced at a different scale so that it has an area of 6 square inches and can fit in a brochure. At what scale should the map be reproduced so that it fits on the brochure? Show your reasoning.
* (From Unit 2, Lesson 7.)



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