Linear or Non-Linear…You Decide

Directions: Identify the following equations as linear (L) or non-linear (N). If an equation is non-linear, describe why.

__N__ $12x^2y = 6$ _____ $4(x + 2) = 5x$

This equation is non-linear because the variable, x, has a power of 2.

_____ $17x - 5 = 2x - 31$ _____ $3x^2 + 5 = \dfrac{1}{9}$

_____ $\dfrac{2}{3}z - 9 = 9$ _____ $\dfrac{1}{x + 2} + 8 = 5$

_____ $y = x^2 + 3x + 2$ _____ $3x + 2y = 7$

_____ $y = \dfrac{2}{3}x - 5$ _____ $2xy = 14$