

Algebra /

Factoring a quadratic with leading coefficient greater than 1: Problem...

$$20y^2 + 13y - 15$$

$$\left(\frac{20y + 25}{5} \right) \left(\frac{20y - 12}{4} \right)$$

$$(4y + 5)(5y - 3)$$

① Check for GCF

$$20 \times -15$$

$$-300$$

$$\begin{array}{r} 300 \\ 1, 300 \\ 2, 150 \\ 3, 100 \\ 4, 75 \\ 5, 60 \\ 6, 50 \\ 7, \\ 8, \\ 9, \\ 10, 30 \\ 11, \\ 12, 25 \end{array}$$

$$\begin{array}{r} 20 \times -15 \\ -300 \\ +25 \quad -12 \\ +13 \end{array}$$

$$21x^2 + 8x - 4$$

$$\left(\frac{21x + 14}{7} \right) \left(\frac{21x - 6}{3} \right)$$

$$(3x + 2)(7x - 2)$$

$$21 \times -4$$

$$-84$$

$$\begin{array}{r} 84 \\ 1, 84 \\ 2, 42 \\ 3, \\ 4, 21 \\ 5, \\ 6, 14 \end{array}$$

$$\begin{array}{r} 21 \times -4 \\ -84 \\ +14 \quad -6 \\ +8 \end{array}$$

$$(14)(-6) = -84$$

$$(14)(-6) = +8$$