## 3.3 Common Factors of a Polynomial

October-11-13 11:00 AM

monomial: I term expression

binomial: 2 term expression

polynomial: 2 or move term expression

Factor the polynomial ⇒ write a polynomial as a product (answer when you multiply) of factors.

$$\frac{5x.1}{3g+6}$$

$$+3$$

$$+3$$

$$3(lg + 2)$$

FIND the GCF

\* Check your answer #

$$3(9+2)$$

$$=39+6$$

$$\frac{\text{Ex.}^{\sharp}\lambda}{8d+12d^2}$$

$$4\left(2d'+3d^2\right) = 4d\left(2+3d\right)$$

# check your answer #

$$4d'(2 + 3d')$$

$$= 8d + 12d^{2}$$

Factor the trinomial 18z2-12z+6. Verify that the factors are cornect.

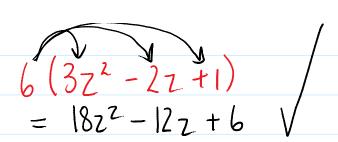
$$\frac{18z^{2} - 12z + 6}{\frac{1}{16}}$$

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$$\frac{1}{16}$$

$$\frac{1}{16}$$

\* Check your answer #



$$\frac{\text{Ex}^{#4}}{\text{factor}} \frac{-20c^{4}d}{-20c^{4}d} - \frac{30c^{3}d^{2}}{-25cd} - \frac{25cd}{-5cd} = 5(-4c^{4}d - 6c^{3}d^{2} - 5cd) \quad \text{can only factor} \\ = 5cd(-4c^{3} - 6c^{2}d - 5)$$