

Factor using only GCF.

$$60c^5dg^6 + 48c^3d^3g^5 - 36c^2d^2g^9$$

$$12c^2dg^5(5c^3g + 4cd^2 - 3dg^4)$$

Factor Completely.

$$8c^3 - 240c$$

$$8c(c^2 - 30)$$

GCF is the only factoring that can be done.

Factor Completely.

$$8g^4 - 2g^2 - 36 = 2(4g^4 - g^2 - 18)$$

$$2(4g^2 - 9)(g^2 + 2)$$

$$2(2g + 3)(g^2 + 2)$$

Factor Completely.

$$25m^2 - 60m + 36 = (5m - 6)^2$$

$$(5m - 6)^2$$

Factor Completely.

$$25m^2 - 60m + 36$$

The formula for this kind of factoring is:

$$(a)^2 + 2ab + (b)^2 = (a+b)^2$$

If you don't recognize this kind of factoring you can always factor using the "X" and the "Box"

because **a** and **c** are both perfect squares you might be able to factor this way:

$\sqrt{25}$ $\sqrt{36}$
 $= 5$ $= 6$
 $5 \cdot 6 = 30$
because b (the middle) term
is twice this product this
trinomial will always factor
into $(\quad)^2$
 $(5m - 6)^2$

this sign is always the same
as the original sign for the middle term