

1. Factor each of the following by removing a common factor.

a) $6x^2 - 12x$

b) $4b - 24b^2$

c) $12n^2 + 15$

d) $14x - 49$

e) $-10b - 8$

f) $-9k^4 - 15k^3$

g) $18x^5 - 63x^4$

h) $72p^4 + 81p$

i) $80n^3 + 50n^2$

j) $18n^9 + 4n^2$

k) $24x^2y + 16x^3y^2$

l) $3x^4 - 12x^6 + 15x^2$

2. Factor each of the following by difference of squares.

You may need to remove a common factor first!

a) $x^2 - 9$

b) $16x^2 - 1$

c) $9x^2 - 25$

d) $81 - 16x^2$

e) $7x^2 - 28$

f) $16x^2 - 4$

g) $32x^2 - 2$

h) $4x^2 - 25$

i) $16x^4 - 25$

j) $9x^2 - 25y^2$

k) $16x^2 - 81y^2$

l) $18x^3 - 2x$