

1. Factor each of the following by grouping. You might have to reorder the terms before you can factor by grouping. Check your answers by multiplying all the factors back together.

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

check:

(b) $x^3 - x^2 - 3x + 3$

check:

(c) $6ax - by + 2bx - 3ay$

check:

(d) $2rs + 4s - r - 2$

check:

(e) $x^2y + 6x - 3x^3 - 2y$

check:

2. Factor each of the following trinomials. Check your answers by multiplying all the factors back together.

(a) $x^2 - 12x + 32$

check:

(b) $y^2 + 10y - 24$

check:

(c) $t^2 + 9t + 8$

check:

(d) $x^2 + 10x + 25$

check:

(e) $2y^2 - 13y + 15$

check:

(f) $16y^2 + 14y + 3$

check: