

3:05 | Grouping Symbols

Name: _____

Class: _____

Examples

Remove brackets.

$$\begin{aligned} 1 \quad & -2(3x - 7) \\ & = -2 \times 3x - -2 \times 7 \\ & = -6x + 14 \end{aligned}$$

$$\begin{aligned} 2 \quad & 8(2p + 3q) \\ & = 8 \times 2p + 8 \times 3q \\ & = 16p + 24q \end{aligned}$$

$$\begin{aligned} 3 \quad & a(2a - 5) \\ & = a \times 2a - a \times 5 \\ & = 2a^2 - 5a \end{aligned}$$

Exercise

1 Simplify.

a $3 \times 4y$

c $10 \times 3a$

e $c \times 3c$

g $2x \times -7$

i $2m \times 5m$

k $5a \times 7$

b $-4 \times 6p$

d $5 \times 4m$

f 5×-3

h -7×-1

j $-4l \times l$

l -3×6

2 Complete.

a $3(2m + 5) = 3 \times 2m + 3 \times \dots$

c $a(5a - 1) = a \times \dots - a \times 1$

e $-2(m + 5) = -2 \times m + -2 \times \dots$

b $4(3x - 7) = 4 \times 3x - \dots \times 7$

d $10(c - 3d) = 10 \times c - 10 \times \dots$

f $m(3m + 4) = m \times 3m + m \times \dots$

3 Remove brackets.

a $5(c - 4)$

c $q(2q - 1)$

e $-2(c + 5)$

g $6(4n - 1)$

i $-7(2g - 3)$

k $4x(2x - 3)$

m $5(2x - 11y)$

o $3c(2c - 1)$

q $5(7q + 4)$

s $8y(y - 4)$

u $12(3m + 5n)$

b $x(x + 5)$

d $8(2y - 3)$

f $r(r + 3)$

h $2m(m + 3)$

j $y(2y + 7)$

l $10(4a + 3b)$

n $-3(6t + 7)$

p $-(4k + l)$

r $-x(4x - 7)$

t $2n(5 - 3n)$

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1 a $12y$	b $-24p$	c $30a$	d $20m$	e $3c^2$	f -15
g $-14x$	h 7	i $10m^2$	j $-4l^2$	k $35a$	l -18
2 a 5	b 4	c $5a$	d $3d$	e 5	f 4
3 a $5c - 20$	b $x^2 + 5x$	c $2q^2 - q$	d $16y - 24$	e $-2c - 10$	f $r^2 + 3r$
g $24n - 6$	h $2m^2 + 6m$	i $-14g + 21$	j $2y^2 + 7y$	k $8x^2 - 12x$	l $40a + 30b$
m $10x - 55y$	n $-18t - 21$	o $6c^2 - 3c$	p $-4k - l$	q $35q + 20$	r $-4x^2 + 7x$
s $8y^2 - 32y$	t $10n - 6n^2$	u $36m + 60n$			