

# 8:04 | Equations with Fractions 2

Name: \_\_\_\_\_

Class: \_\_\_\_\_

## Examples

Simplify.

$$1 \quad 3 \times \left( \frac{4q-3}{3} \right) = \cancel{3} \times \frac{(4q-3)}{\cancel{3}} \\ = 4q - 3$$

$$2 \quad 8 \times \left( \frac{2x-5}{4} \right) = \cancel{8} \times \frac{(2x-5)}{\cancel{4}} \\ = 2(2x-5) \\ = 4x - 10$$

$$3 \quad 10 \times \left( \frac{2a}{5} + \frac{a}{2} \right) = \cancel{10} \times \frac{2a}{\cancel{5}} + \cancel{10} \times \frac{a}{\cancel{2}} \\ = 4a + 5a \\ = 9a$$

$$4 \quad 6 \times \left( \frac{n+3}{3} + \frac{n-1}{2} \right) \\ = \cancel{6} \times \frac{(n+3)}{\cancel{3}} + \cancel{6} \times \frac{(n-1)}{\cancel{2}} \\ = 2(n+3) + 3(n-1) \\ = 2n + 6 + 3n - 3 \\ = 5n + 3$$

## Exercise

1 Simplify.

a  $5 \times \left( \frac{2a+1}{5} \right)$

b  $6 \times \left( \frac{4m-1}{3} \right)$

c  $2 \times \left( \frac{c+3}{2} \right)$

d  $15 \times \left( \frac{t-4}{5} \right)$

e  $4 \times \left( \frac{3x-4}{4} \right)$

f  $3 \times \left( \frac{h-1}{3} \right)$

g  $12 \times \left( \frac{2y-3}{4} \right)$

h  $10 \times \left( \frac{2p+5}{2} \right)$

i  $8 \times \left( \frac{3n+5}{2} \right)$

j  $3 \times \left( \frac{2c-7}{3} \right)$

k  $6 \times \left( \frac{5k+3}{2} \right)$

l  $7 \times \left( \frac{x-10}{7} \right)$

2 Simplify.

a  $6 \times \left( \frac{x}{2} + \frac{x}{3} \right)$

b  $12 \times \left( \frac{x+2}{3} - \frac{x+3}{4} \right)$

c  $8 \times \left( \frac{t}{2} + \frac{t}{4} \right)$

d  $9 \times \left( \frac{2x}{9} + \frac{x}{3} \right)$

e  $8 \times \left( \frac{a-1}{4} + \frac{a+3}{2} \right)$

f  $10 \times \left( \frac{n+1}{2} + \frac{n}{5} \right)$

g  $6 \times \left( \frac{4x}{3} - \frac{x}{6} \right)$

h  $4 \times \left( \frac{q+5}{4} + \frac{q-2}{2} \right)$

i  $15 \times \left( \frac{h-2}{3} - \frac{h+3}{5} \right)$

j  $20 \times \left( \frac{3x}{10} - \frac{x}{5} \right)$

k  $18 \times \left( \frac{2y+3}{6} - \frac{y-2}{3} \right)$

l  $14 \times \left( \frac{6c}{7} - \frac{c}{2} \right)$

m  $10 \times \left( \frac{p}{2} + \frac{4p}{5} \right)$

n  $12 \times \left( \frac{m-3}{2} + \frac{m+5}{6} \right)$

o  $16 \times \left( \frac{2x-3}{4} + \frac{3x+1}{8} \right)$

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1 a	$2a+1$	b	$8m-2$	c	$c+3$	d	$3t-12$	e	$3x-4$	f	$h-1$
g	$6y-9$	h	$10p+25$	i	$12n+20$	j	$2c-7$	k	$15k+9$	l	$x-10$
2 a	$5x$	b	$x-1$	c	$6t$	d	$5x$	e	$6a+10$	f	$7n+5$
g	$7x$	h	$3q+1$	i	$2h-19$	j	$2x$	k	$2l$	l	$5c$
m	$13p$	n	$8m-8$	o	$14x-10$						