Expressions

October 31, 2016 1:48 PM

1. Collect like terms. Simplify:

a) $4d + 2c + 1d + 3c$

$4d + 1d + 2c + 3c$

$5d + 5c$

b) $12z + 6L - 3z + 2L$

$12z - 3z + 6L + 2L$

$9z + 8L$

c) $-10x + 10y - 10x + 5y$

$-10x - 10x + 10y + 5y$

$-20x + 15y$

d) $x + 2y - 4x - 8y - 2x$

$1x - 4x - 2x + 2y - 8y$

$-5x - 6y$

e) $5m - p + 2m - p + 6p$

$5m + 2m - p - p + 6p$

$7m + 4p$

f) $-2d - 3e - e - 5d - d - 2e$

$-2d - 5d - d - 3e - 1e - 2e$

$-8d - 6e$

2. Solve $2x + 4$ if

a) $x = 11$ b) $x = 15$ c) $x = -5$

$2(11) + 4$
$22 + 4$
26

$2(15) + 4$
$30 + 4$
34

$2(-5) + 4$
$-10 + 4$
-6

3. Solve $3a - 4b$ if

a) $a = 10$ $b = 6$ b) $a = -2$ $b = 2$

$3(10) - 4(6)$

$3(-2) - 4(2)$

30 − 24
6

−14

c) $a = -5$ $b = -4$

$3(-5) - 4(-4)$
$-15 + 16$
1

d) $a = -8$ $b = -3$

$3(-8) - 4(-3)$
$-24 + 12$

4. Write an expression to show:

a) a number increased by 12.

$n + 12$

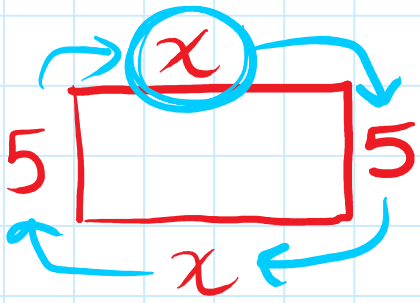
b) a number tripled then decreased by eight.

$3n - 8$

c) the sum of a number and 4 squared.

$(n + 4)^2$

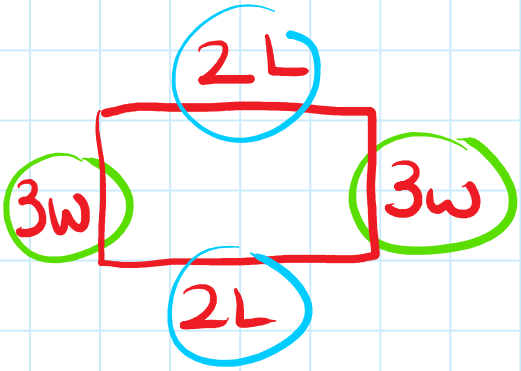
d) the perimeter of a rectangle with a width of 5 and Length x.



$x+5+x+5$

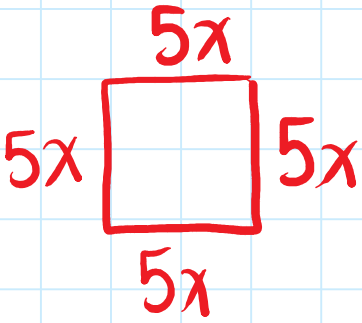
$2x+10$

e) the perimeter of a rectangle with a Length 2L and width 3x



$2L+2L+3w+3w$

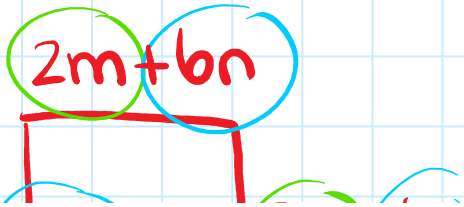
f) the perimeter of a square with a side length 5x



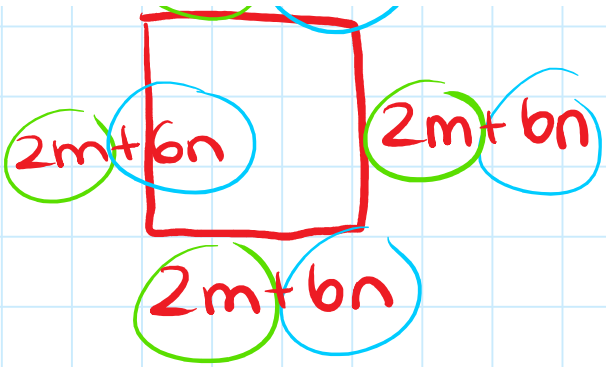
$4(5x) = 20x$

$5x+5x+5x+5x = 20x$

g) the perimeter of a square with a side length $2m+6n$



$8m+24n$



$8m+24n$