EXTRA PRACTICE!   # 7

Name: _____ Date: _____ Period: _____

Perimeter and Algebra?!

Perimeter is usually associated with geometry (shapes), but it can also be found using algebra (numbers and variables). The perimeter of *any* polygon can be found using algebra – even i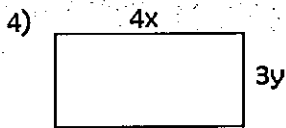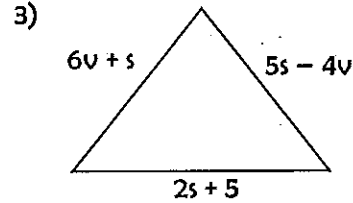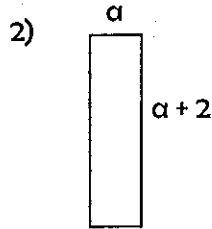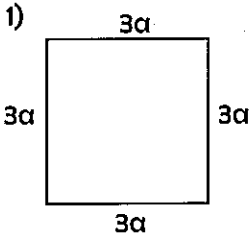f we don't know exactly what the sides equal! For each problem below, find the perimeter of the polygon as an algebraic expression in simplest form.

1)

$3a$

$3a$ $3a$

$3a$

2)

a

$a + 2$

3)

$6v + s$ $5s - 4v$

$2s + 5$

4)

$4x$

$3y$

5)

a

c

b a

c

b

6)

$5y - 1$

7)

$36x$

$42x$

8)

$3x$

$4x + 8$

$3(x - 2)$

9)

$3x - 4$

$2x + 1$
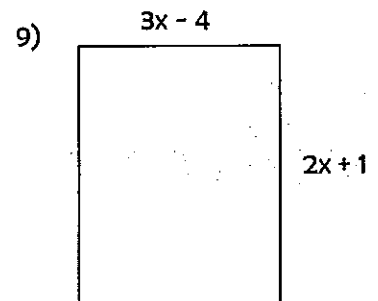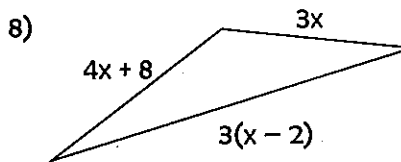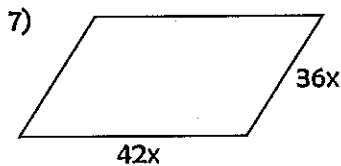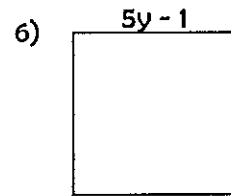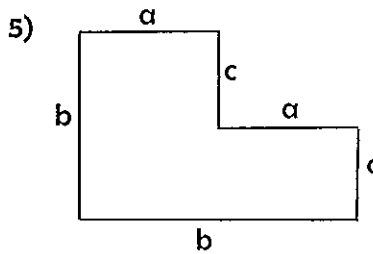
10) An equilateral triangle has a perimeter of $6x - 24$. What does each side of the triangle measure?

11) Create your own problem: Draw any shape (it can be a rectangle, triangle, or irregular similar to problem number 5). Label the sides with an algebraic expression. Each expression must have at least 2 terms. Find the perimeter of your shape.

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