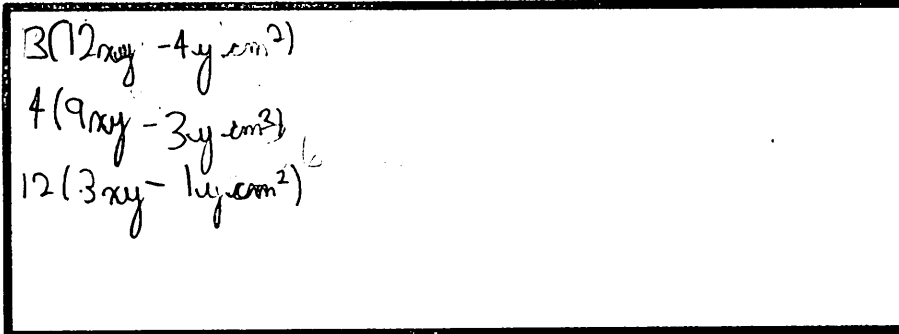


Ticket Out the Door

List 3 possible lengths and widths possible if the area of this rectangle is: $36xy - 12y \text{ cm}^2$. Justify your responses.

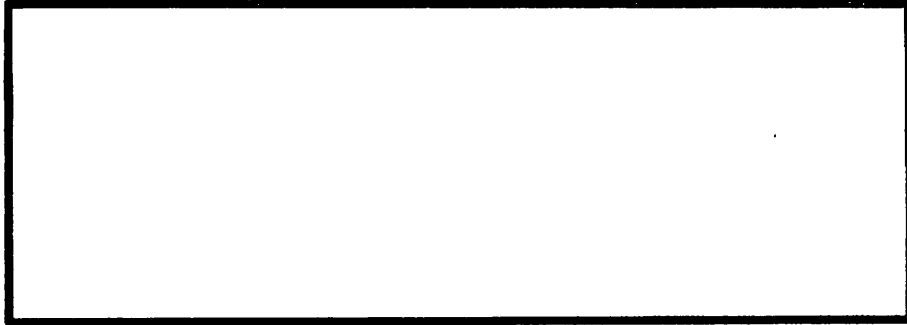


Handwritten solutions for factoring the area expression $36xy - 12y \text{ cm}^2$:

$$3(12xy - 4y \text{ cm}^2)$$
$$4(9xy - 3y \text{ cm}^2)$$
$$12(3xy - 1y \text{ cm}^2)$$

Ticket Out the Door

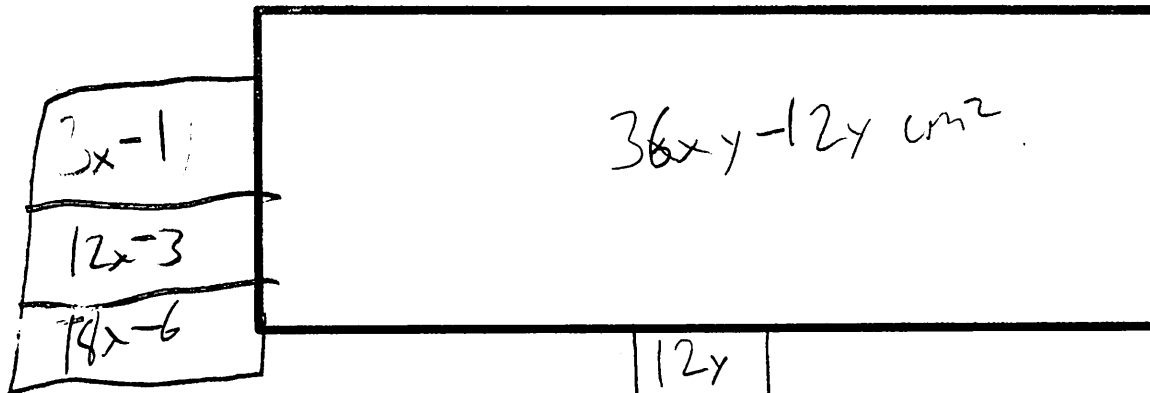
List 3 possible lengths and widths possible if the area of this rectangle is: $36xy - 12y \text{ cm}^2$. Justify your responses.



I don't understand it yet

Ticket Out the Door

List 3 possible lengths and widths possible if the area of this rectangle is: $36xy - 12y \text{ cm}^2$. Justify your responses.



$$(3x-1)(12y)$$

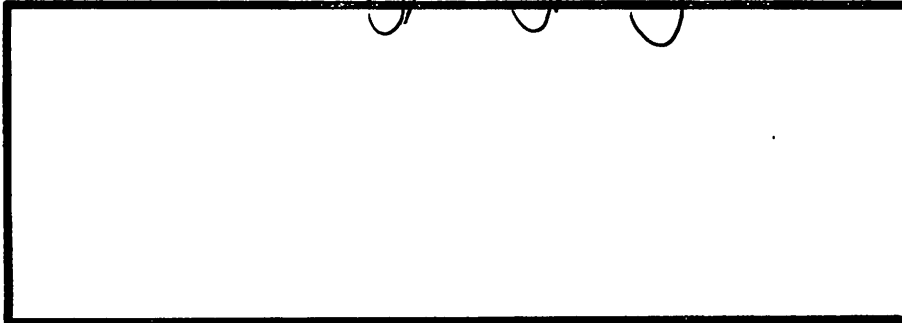
$$\begin{array}{r} 12y \\ \hline 3y \\ \hline 2y \end{array}$$

$$\begin{array}{l} (12x-3)(3y) \\ (18x-6)(2y) \end{array}$$

Ticket Out the Door

List 3 possible lengths and widths possible if the area of this rectangle is: $36xy - 12y \text{ cm}^2$. Justify your responses.

$6xy, 8xy, 2xy \text{ cm}^2$



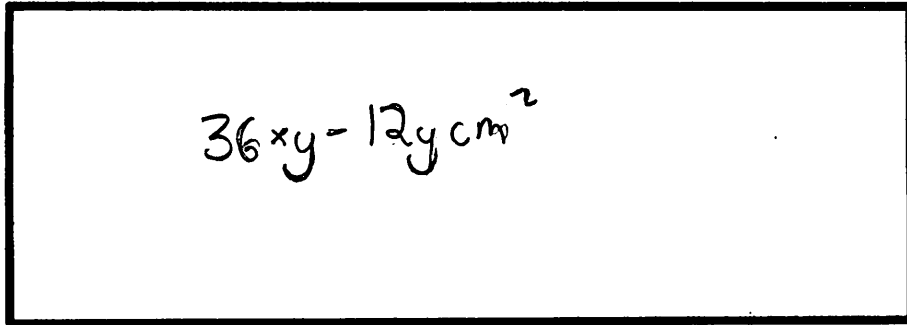
$6y$
 $2y$
 $4y$
 cm^2

$36xy - 12y \text{ cm}^2$

$\frac{14}{36}$

Ticket Out the Door

List 3 possible lengths and widths possible if the area of this rectangle is: $36xy - 12y \text{ cm}^2$. Justify your responses.



$$3y(12xy + 4y)y$$

Ticket Out the Door

List 3 possible lengths and widths possible if the area of this rectangle is: $36xy - 12y \text{ cm}^2$. Justify your responses.

$$\begin{aligned} 6y(6x - 2 \text{ cm}^2) &= 36xy - 12y \text{ cm}^2 \\ 3y(12x - 4 \text{ cm}^2) &= 36xy - 12y \text{ cm}^2 \\ 12y(3x - 1 \text{ cm}^2) &= 36xy - 12y \text{ cm}^2 \end{aligned}$$

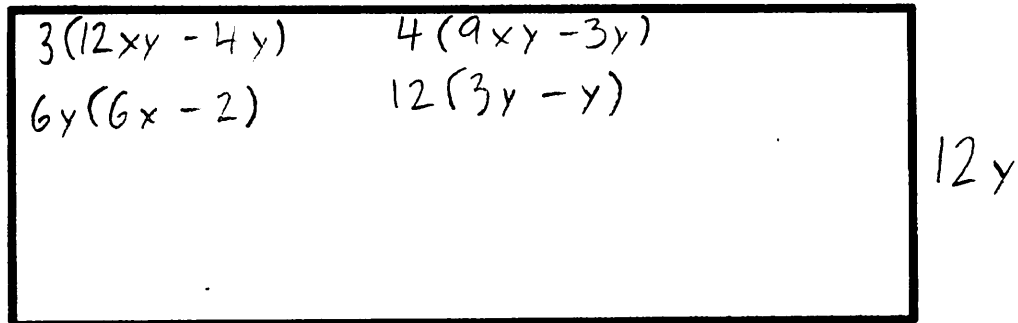
Ticket Out the Door

List 3 possible lengths and widths possible if the area of this rectangle is: $36xy - 12y \text{ cm}^2$. Justify your responses.

$$\begin{array}{ccc} 12(3xy - y) & 4(9xy - 3y) & 6(6xy - 2y) \\ 36xy - 12y & 36xy - 12y & 36xy - 12y \end{array}$$

Ticket Out the Door

List 3 possible lengths and widths possible if the area of this rectangle is: $36xy - 12y \text{ cm}^2$. Justify your responses.



$$3(12xy - 4y)$$

$$36xy$$

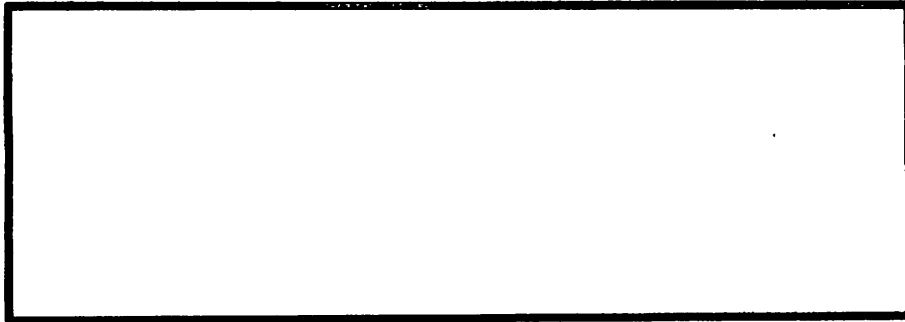
$$6y(6x - 2)$$

$$12(3y - y)$$

$$4(9xy - 3y)$$

Ticket Out the Door

List 3 possible lengths and widths possible if the area of this rectangle is:
 $36xy - 12y \text{ cm}^2$. Justify your responses.



$$6(6xy - 2y \text{ cm}^2)$$

$$4(9xy - 3y \text{ cm}^2)$$

$$3(12xy - 4y \text{ cm}^2)$$

$$2(18xy - 6y \text{ cm}^2)$$

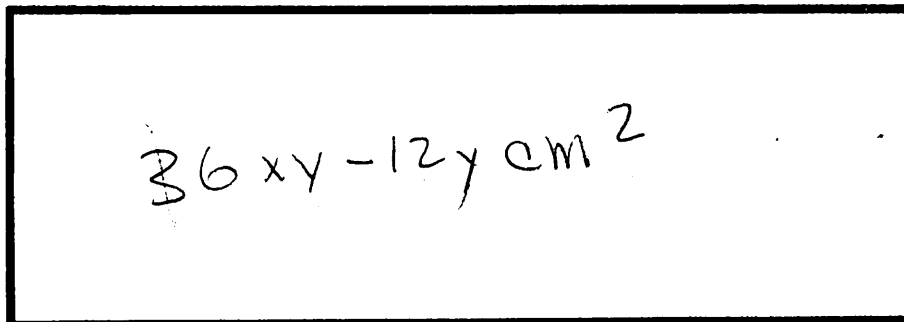
$$12(3xy - 1y \text{ cm}^2)$$

$$0.5(72xy - 24y \text{ cm}^2)$$

$$1(36xy - 12y \text{ cm}^2)$$

Ticket Out the Door

List 3 possible lengths and widths possible if the area of this rectangle is:
 $36xy - 12y \text{ cm}^2$. Justify your responses.

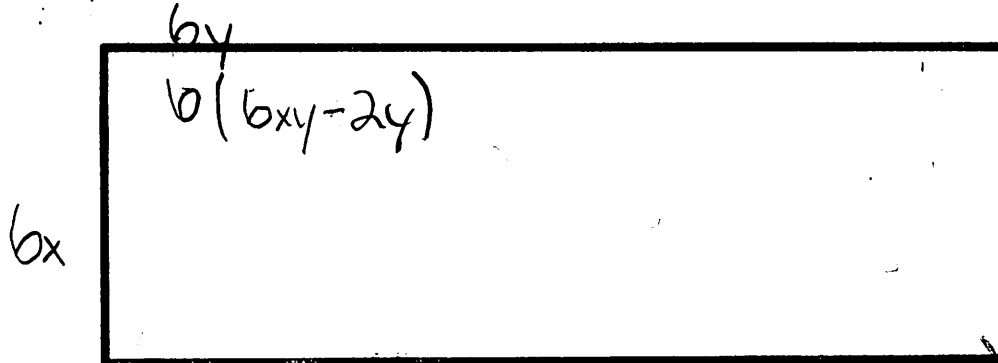


$$12y(3x - 1)$$

$$12y \quad 36xy - 12y$$

Ticket Out the Door

List 3 possible lengths and widths possible if the area of this rectangle is: $36xy - 12y \text{ cm}^2$. Justify your responses.



Ticket Out the Door

List 3 possible lengths and widths possible if the area of this rectangle is: $36xy - 12y \text{ cm}^2$. Justify your responses.

$$\begin{aligned}6y(6x - 2 \text{ cm}^2) &= 36xy - 12y \text{ cm}^2 \\3y(12x - 4 \text{ cm}^2) &= 36xy - 12y \text{ cm}^2 \\18xy + 2y \text{ cm}^2 + 18xy - 14y \text{ cm}^2 &= 36xy - 12y \text{ cm}^2\end{aligned}$$

Ticket Out the Door

List 3 possible lengths and widths possible if the area of this rectangle is: $36xy - 12y \text{ cm}^2$. Justify your responses.

$$36xy - 12y \text{ cm}^2$$

$$12 (3xy - 1y \text{ cm}^2)$$

$$3 (12xy - 4y \text{ cm}^2)$$

$$4 (9xy - 3y \text{ cm}^2)$$

$$2y (18x - 6 \text{ cm}^2)$$

$$14a(a - 14) \times 2 \times a$$

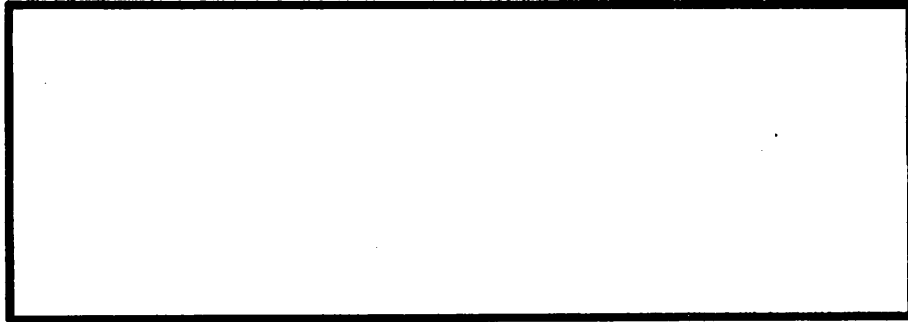
$$14a(a - 2)$$

$$14a^2 - 28a$$

$$7 \cdot 7 (a^2 - 4a)$$

Ticket Out the Door

List 3 possible lengths and widths possible if the area of this rectangle is:
 $36xy - 12y^2$. Justify your responses.



$$12(3xy - y^2)$$
$$3(4xy - 4y^2)$$
$$4(3xy - 3y^2)$$
$$6(6xy - 2y^2)$$
$$2(18xy - 6y^2)$$

Ticket Out the Door

List 3 possible lengths and widths possible if the area of this rectangle is: $36xy - 12y^2$. Justify your responses.

$$A = 36xy - 12y^2$$

① $6y(6x - 2y)$
 $36xy - 12y^2$

② $3y(12x - 4y)$
 $36xy - 12y^2$

③ $4y(9x - 3y)$
 $36xy - 12y^2$

Ticket Out the Door

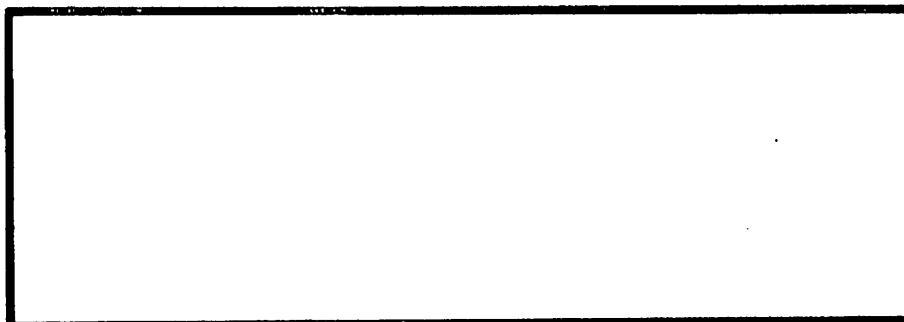
List 3 possible lengths and widths possible if the area of this rectangle is: $36xy - 12y \text{ cm}^2$. Justify your responses.

$$6y(6x - 2 \text{ cm}^2) = 36xy - 12y \text{ cm}^2$$

3x

Ticket Out the Door

List 3 possible lengths and widths possible if the area of this rectangle is: $36xy - 12y \text{ cm}^2$. Justify your responses.



$$12y = 3x + y$$

$$3y(12x + 4)$$

$$2y(18x + 6)$$