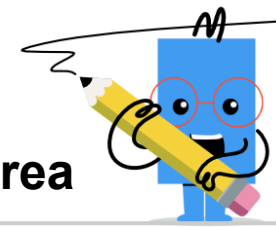
Name

Quadratic Equation Word Problem To Expression (Standard Form zeros) - Area and Border



1

A 11 by 7 garden has a ditch of width x on all sides. Its total area, including the ditch is 140.

What quadratic equation, in standard form, would solve for the ditch width?

A $6x^2 + 36x - 66 = 0$

B $4x^2 + 36x - 63 = 0$

C $5x^2 + 37x - 63 = 0$

2

A 2 by 8 garden has a ditch of width x on all sides. Its total area, including the ditch is 66.

What quadratic equation, in standard form, would solve for the ditch width?

A $4x^2 + 20x - 50 = 0$

B $4x^2 + 20x - 49 = 0$

C $4x^2 + 19x - 49 = 0$

3

A 2 by 10 painting has a border of width x on all sides. Its total area (border included) is 70.

What quadratic equation, in standard form, would solve for the border width?

A $1x^2 + 27x - 50 = 0$

B $6x^2 + 24x - 50 = 0$

C $4x^2 + 24x - 50 = 0$

4

A 7 by 4 painting has a border of width x on all sides. Its total area (border included) is 64.

What quadratic equation, in standard form, would solve for the border width?

A $-1x^2 + 22x - 38 = 0$

B $3x^2 + 26x - 36 = 0$

C $4x^2 + 22x - 36 = 0$

5

A 4 by 11 painting has a border of width x on all sides. Its total area (border included) is 60.

What quadratic equation, in standard form, would solve for the border width?

A $1x^2 + 30x - 19 = 0$

B $4x^2 + 30x - 16 = 0$

C $1x^2 + 33x - 16 = 0$

6

A 5 by 5 garden has a ditch of width x on all sides. Its total area, including the ditch is 54.

What quadratic equation, in standard form, would solve for the ditch width?

A $7x^2 + 20x - 33 = 0$

B $6x^2 + 20x - 30 = 0$

C $4x^2 + 20x - 29 = 0$

7

A 8 by 7 painting has a border of width x on all sides. Its total area (border included) is 99.

What quadratic equation, in standard form, would solve for the border width?

A $4x^2 + 27x - 45 = 0$

B $2x^2 + 30x - 43 = 0$

C $4x^2 + 30x - 43 = 0$

8

A 8 by 11 garden has a ditch of width x on all sides. Its total area, including the ditch is 130.

What quadratic equation, in standard form, would solve for the ditch width?

A $4x^2 + 38x - 42 = 0$

B $7x^2 + 42x - 42 = 0$

C $4x^2 + 35x - 47 = 0$