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Quadratic Equation Word Problem To Solution - Area and Border

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1

A 8 by 3 garden has a ditch of width x on all sides. Its total area, including the ditch is 84.

What is the border width that gives a total area of 84m^2

A $x = 4.75m$	B $x = 2m$
C $x = 1.75m$	

2

A 2 by 8 painting has a border of width x on all sides. Its total area (border included) is 72.

What is the border width that gives a total area of 72m^2

A $x = 1.75m$	B $x = 2m$
C $x = 1.25m$	

3

A 9 by 7 garden has a ditch of width x on all sides. Its total area, including the ditch is 96.

What is the border width that gives a total area of 96m^2

A	B
$x = 2.174m$	$x = 0.924m$

4

A 11 by 7 painting has a border of width x on all sides. Its total area (border included) is 112.

What is the border width that gives a total area of 112m^2

A $x = 1.365m$	B $x = 1.385m$
C $x = 0.885m$	

5

A 10 by 10 garden has a ditch of width x on all sides. Its total area, including the ditch is 144.

What is the border width that gives a total area of 144m^2

A $x = 3.25m$	B $x = 1m$
C $x = 0.25m$	

6

A 5 by 2 painting has a border of width x on all sides. Its total area (border included) is 28.

What is the border width that gives a total area of 28m^2

A $x = 1.5m$	B $x = 0.25m$
C $x = 1m$	

7

A 5 by 7 painting has a border of width x on all sides. Its total area (border included) is 72.

What is the border width that gives a total area of 72m^2

A $x = 0.772m$	B $x = 1.272m$
C $x = 1.022m$	

8

A 10 by 8 garden has a ditch of width x on all sides. Its total area, including the ditch is 110.

What is the border width that gives a total area of 110m^2

A $x = 3.518m$	B $x = 0.768m$
C $x = 0.732m$	

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