Name

1

A 7 by 7 painting has a border of width x on all sides. Its total area (border included) is 80.

What equation gives the area of the painting?

A
$$80 = (2 \cdot 7 + x) \cdot (2 \cdot 7 + x)$$

B
$$80 = (7 + 2x) \cdot (7 + 2x)$$

C
$$80 = (\frac{7}{2} - x) \cdot (\frac{7}{2} - x)$$

2

A 2 by 2 painting has a border of width x on all sides. Its total area (border included) is 24.

What equation gives the area of the painting?

A
$$24 = (2 + 2x) \cdot (2 + 2x)$$

B
$$24 = (2 - \frac{x}{2}) \cdot (2 - \frac{x}{2})$$

C
$$24 = (2 - 2x) \cdot (2 - 2x)$$

3

A 3 by 10 painting has a border of width x on all sides. Its total area (border included) is 72.

What equation gives the area of the painting?

A
$$72 = (2 \cdot 3 + x) \cdot (2 \cdot 10 + x)$$

B
$$72 = (3 + 2x) \cdot (10 + 2x)$$

4

A 11 by 2 garden has a ditch of width x on all sides. Its total area, including the ditch is 56.

What equation gives the area of the garden?

A
$$56 = (2 \cdot 11 + x) \cdot (2 \cdot 2 + x)$$

B
$$56 = (11 - \frac{x}{2}) \cdot (2 - \frac{x}{2})$$

C
$$56 = (11 + 2x) \cdot (2 + 2x)$$

5

A 7 by 3 painting has a border of width x on all sides. Its total area (border included) is 63.

What equation gives the area of the painting?

A
$$63 = (7 + 2x) \cdot (3 + 2x)$$

B
$$63 = (7 - 2x) \cdot (3 - 2x)$$

6

A 5 by 9 painting has a border of width x on all sides. Its total area (border included) is 78.

What equation gives the area of the painting?

A
$$78 = (5 + 2x) \cdot (9 + 2x)$$

B
$$78 = (5 - \frac{x}{2}) \cdot (9 - \frac{x}{2})$$

C
$$78 = (2 \cdot 5 + x) \cdot (2 \cdot 9 + x)$$

7

A 7 by 9 painting has a border of width x on all sides. Its total area (border included) is 143.

What equation gives the area of the painting?

A
$$143 = (2 \cdot 7 + x) \cdot (2 \cdot 9 + x)$$

B
$$143 = (7 + 2x) \cdot (9 + 2x)$$

8

A 11 by 7 garden has a ditch of width x on all sides. Its total area, including the ditch is 112.

What equation gives the area of the garden?

A
$$112 = (11 - 2x) \cdot (7 - 2x)$$

B
$$112 = (11 + 2x) \cdot (7 + 2x)$$