



## Quadratic Equation Word Problem To Optimization (x) - 3-Sided Rectangle

1

What value of x would maximize the area of the parking lot?

A parking lot that is a rectangle shape is enclosed by x meters of a wall on one side and 21m of fencing on the other 3 sides.

|   |             |   |           |
|---|-------------|---|-----------|
| A | $x = 10.5m$ | B | $x = 10m$ |
| C | $x = 12m$   |   |           |
|   |             |   |           |

2

What value of x would maximize the area of the garden?

A rectangular garden is built along x meters of a wall using a total of 22m of fencing for the other 3 sides.

|   |           |   |           |
|---|-----------|---|-----------|
| A |           | B |           |
|   | $x = 11m$ |   | $x = 12m$ |
|   |           |   |           |

3

What value of x would maximize the area of the parking lot?

A parking lot that is a rectangle shape is enclosed by x meters of a wall on one side and 24m of fencing on the other 3 sides.

|   |             |   |              |
|---|-------------|---|--------------|
| A | $x = 12m$   | B | $x = 13.25m$ |
| C | $x = 11.5m$ |   |              |
|   |             |   |              |

4

What value of x would maximize the area of the parking lot?

A parking lot that is a rectangle shape is enclosed by x meters of a wall on one side and 16m of fencing on the other 3 sides.

|   |             |   |              |
|---|-------------|---|--------------|
| A | $x = 8m$    | B | $x = 10.25m$ |
| C | $x = 7.75m$ |   |              |
|   |             |   |              |

5

What value of x would maximize the area of the parking lot?

A parking lot that is a rectangle shape is enclosed by x meters of a wall on one side and 18m of fencing on the other 3 sides.

|   |          |   |             |
|---|----------|---|-------------|
| A | $x = 9m$ | B | $x = 8.75m$ |
| C | $x = 8m$ |   |             |
|   |          |   |             |

6

What value of x would maximize the area of the parking lot?

A parking lot that is a rectangle shape is enclosed by x meters of a wall on one side and 19m of fencing on the other 3 sides.

|   |            |   |             |
|---|------------|---|-------------|
| A | $x = 10m$  | B | $x = 11.5m$ |
| C | $x = 9.5m$ |   |             |
|   |            |   |             |

7

What value of x would maximize the area of the parking lot?

A parking lot that is a rectangle shape is enclosed by x meters of a wall on one side and 27m of fencing on the other 3 sides.

|   |             |   |              |
|---|-------------|---|--------------|
| A |             | B |              |
|   | $x = 13.5m$ |   | $x = 12.25m$ |
|   |             |   |              |

8

What value of x would maximize the area of the parking lot?

A parking lot that is a rectangle shape is enclosed by x meters of a wall on one side and 15m of fencing on the other 3 sides.

|   |             |   |            |
|---|-------------|---|------------|
| A | $x = 9.25m$ | B | $x = 7.5m$ |
| C | $x = 6.5m$  |   |            |
|   |             |   |            |