Today's Plan:

Learning Target (standard): I will solve real-world optimization application problems.

Students will: Complete practice problems over previous concepts at the boards, put up homework problems on the board and make necessary corrections to their own work, and take a quiz on optimization problems.

Teacher will: Provide practice problems over previous concepts, check homework problems for accuracy and provide students feedback, and describe and provide quiz problems.

Assessment: Board work, homework check and quiz

Differentiation: Students will work at the board, go over and correct homework at their seats, and actively engage in quiz problems.

Optimization Review:

1)
$$x = 2\sqrt{2}$$
 2) $x = 750 ft$ 3) $x = \frac{7}{2}$
 $y = 2\sqrt{2}$ $y = 1500 ft$ $y = \frac{\sqrt{14}}{2}$

$$4)x = 4 + 2\sqrt{3}$$

$$profit = (48\sqrt{3} + 80) \text{ thousand}$$