

Name: _____

Math 1030 Quiz #3 (July 16th, 2015)

1. After some research we found that our demand price function is $p_d(q) = -3q + 125$ (dollars per item). In addition, our fixed costs are \$70 and our variable costs are \$7.15 per item.

(a) Revenue: $R(q) =$ _____ Cost: $C(q) =$ _____

(b) Find both break even points. Round q to 3 decimal places. $q =$ _____

(c) $MP(25) =$ _____

(d) Are we making a profit or losing money when we sell a total of 25 items? Profit / Loss

2. All we know is that $R(30) = \$50$ and $MR(30) = \$2$. Compute $R(q)$ at the following quantities. Circle "Exact" if the answer is exact or "Approximate" if the answer is an approximation using the marginal function.

(a) $R(29) =$ _____ Exact / Approximate

(b) $R(31) =$ _____ Exact / Approximate

(c) $R(33) =$ _____ Exact / Approximate

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