Word Problems (Subtraction-Division)

Example.

Problem: You buy 300 oranges for $75. By the time you get them to market, 40 have spoiled. How much must you sell the remaining oranges for to incur no loss (to "break even")?

Solution: "Incur no loss," or "break even," means you don't lose any money. In other words, that, if you spent $75 for the oranges, you make $75 when you sell them.

You bought 300, but you have only 300 - 40 = 260 to sell.

You need to sell the 260 to make $75.

So, you need to sell each orange for $75/260 = $0.288.

Rounding to the nearest cent, we need to sell each orange for 29¢.

Exercises.

1. You buy 8 dogs for $900. But, before you sell the dogs, an aunt falls in love with one and you give it to her for a present. Then another aunt wants one! You give the second aunt a dog. How much must you sell each remaining dog for to incur no loss?

2. You buy 300 barrels of olive oil for $54,621.50. You keep 10 for friends and yourself. How much must you sell the remaining barrels for to incur no loss?

3. In your import business, you buy 40 mink coats for $208,716.75. You gamble, and do not buy insurance on them. When they arrive, you find 2 damaged and 5 missing. For how much must you sell each remaining coat to break even?

4. In the country, you buy 1,000 packages of strawberries for $4,000; you are going to take them into town to sell. In town, you can get more money for them. On the way into town, 30 packages spoil, you eat 5, a bad employee steals 100, you leave 30 at a store you owe money, and you leave another 35 at another store you owe some money. How much must you sell the remaining strawberries for to incur no loss?

Answers

1. $150

2. $188.35

3. $6,324.75

4. $5