

# Math Diversion Problem 606

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Hasty decisions are the makings for eternal regrets.  
— The Author

The YouTube video is found at:

Source: <https://www.youtube.com/watch?v=QFBa7PrAL7g>  
Title: GRE Quants - WORD PROBLEMS  
Presenter: Manhattan Review

## 1 The Problem

Franky sells a calculator to Wren at a gain of 17% and Wren sell it to John at loss 25%. If John pays \$1842.75 for it, what did Franky pay for it?

(a) \$ 2080 (b) \$ 2100 (c) \$ 2800 (d) \$ 3000?

## 2 The Solution

prices paid:      Franky  $\longrightarrow$  Wren       $\longrightarrow$  John  
 $P$                        $1.17P$                        $(0.75)(1.17P) = \$1842.75$

So, solve for  $P$ :

$$P = \frac{\$1842.75}{(0.75)(1.17)} = \$2180.00. \quad (1)$$