Use a calculator. Round to dollars as you go along.

For the related rates problem below the procedure is, as usual:

·   Find an equation that relates the two quantities.
·   Use the chain rule and other differentiation forms to implicitly differentiate both variables with respect to time.
·   Identify given data by the appropriate variable or derivative.
·   Fill in the knowns from your given data and solve for the unknown.
·   Answer in *appropriate units in a way that makes sense*.

The price p (in dollars) and demand x for a product are related by:

$$x^2 + 2xp + 25p^2 = 74{,}500$$

If price is increasing at a rate of $2 per month at the time when price is $30, find the rate of change of demand.