

1. [6 points] Taylor 3.2
2. [6 points] Taylor 3.10
3. [6 points] Taylor 3.19
4. [6 points] Taylor 3.22
5. [6 points] Taylor 3.27
6. [6 points] Taylor 3.34
7. [6 points] Taylor 3.46
8. [6 points] Suppose we measure  $x$  and  $y$  in order to determine  $q$ , given by  $q = \frac{1}{2}x^n y^m$ , where  $n$  and  $m$  are exact. The measurements for  $x$  and  $y$  have errors  $\delta x$  and  $\delta y$ . Find the error in  $q$ .

Use this result to derive a shortcut equation for error propagation similar to the shortcuts in the book. The shortcut you derive will be for multiplication-division-powers-constants. (Feel free to write this shortcut in your book). *Hint: It looks quite similar to the multiplication-division shortcut.*

Question:	1	2	3	4	5	6	7	8	Total
Points:	6	6	6	6	6	6	6	6	48
Score:									