

Name _____

- Write as neatly as you can!
- Basic calculators are allowed—but nothing connected to the internet.
- You must show your work to obtain full credit.

1. (5 points) Write the following expressions as a fraction or a whole number.

(a) $2 \cdot 7^4 \cdot 7^{-3}$

(b) $\frac{2^2}{2^3}$

(c) $(-3)^2 \cdot (-3^2)$

(d) $\frac{1}{7^{-2}}$

(e) $4^{-2} \cdot (2^3)^2$ (*Hint: write $4 = 2^2$.*)

2. (*5 points*) You and a couple of friends go to Guisados for dinner. You order three tacos and one horchata and your bill comes to \$10.50. Your friends order together, getting five tacos and two horchatas, and their total comes to \$18.25.

How much do the tacos cost? The horchatas?

3. (*1 point, extra credit*) On February 19th, the S&P 500 Index hit a maximum high of ≈ 3400 , on February 28th, it had declined to about ≈ 2900 . A “correction” is defined to occur when the stock market declines 10% or more below its maximum. What percentage did the market decline between the 19th and the 28th? Did the S&P 500 see a correction on February 28th?