

Test #2 review questions

By now, you should have done these Evaluates on the computer:

§6.1

§6.2

§6.3 (skip polynomial long division)

§7.1

§7.2

§7.3

In addition to the sections above, the test will also cover §8.2 (only the part on negative exponents) and §11.1 (only the part on functions and domain and range). However, you do NOT need to do the Evaluates for those sections.

Here is a big list of questions to practice in preparation for the second midterm, scheduled for Mon., Feb. 26.

#1) Find $7^5 \cdot 7^3$.

Find more problems like this one on p. 381, #1–5.

#2) Find $\frac{x^3y^7z^{12}}{xy^8z^5}$.

Find more problems like this one on p. 381, #8–10, 20–22.

#3) Find $\left(\frac{10x^4y^7z^{12}}{xy^8z^5}\right)^0$.

Find more problems like this one on p. 381, #23–28, and p. 380, 11, 12.

#4) Find $\frac{(xy)^4}{y^9x^7}$.

Find more problems like this one on p. 381, #11–19, and p. 380, 6–8, 11, 12.

#5) Find $(2v^3 + 6v^2 + 2) - (5v + v^3 + 4v^7 - 3)$.

Find more problems like this one on p. 397, #4, 5, 7, 8, 11, 12 and p. 399 #14–28.

#6) Find $t^3uv^4(2tu - 3uv + 4tv + 5)$.

Find more problems like this one on p. 397, #13–18 and p. 400 #29–41.

#7) Write $(36x^3y^3 + 15x^2y^5) \div 9x^2y$ as a fraction, and simplify.

Find more problems like this one on p. 397, #19–24 and p. 400 #42–56.

#8) Find $(p^2 + 2r + 2)(3r^4 - 2p^4)$.

Find more problems like this one on p. 419, #5–8, 11–16 and p. 421 #1–42.

#9) Find $\frac{50}{10^{-2}+5^{-2}}$.

Find more problems like this one on p. 529, #1–8, 11 and p. 531, #1–24.

#10) Find the GCF of $6abc^4$, $12ac^3$, and $9a^5b^4c^2$.

Find more problems like this one on p. 440, #3–7.

#11) Factor $12a^2 + 18a + 10ab + 15b$ completely.

Find more problems like this one on p. 440, #39–56.

#12) Factor $x^2 - 10x + 24$.

Find more problems like this one on p. 463, #1–28.

#13) Factor $4x^2 - 7xy - 2y^2$.

Find more problems like this one on p. 463, #29–56.

#14) Solve $11x = 6x^2 + 3$.

Find more problems like this one on p. 464, #57–62.

#15) Factor $b^2 - 16b + 64$ completely.

Find more problems like this one on p. 479, #1–28.

#16) Factor $m^2 - 144$ completely.

Find more problems like this one on p. 479, #1–28.

#17) Factor $x^3 + 125$ completely.

Find more problems like this one on p. 479, #1–28.

#18) Factor $2x^3 + 12x^2 + 18x$ completely.

Find more problems like this one on p. 478, #8–12 and p. 479, #26–28.

#19) Let $h(x) = x^3 + 1$. Calculate $h(-4)$.

Find more problems like this one in the §11.1 handout on p. 474, #1, 2, 4, 5, 7, 9, 10, 12.

#20) Find the domain and range of the function $f(x) = |x - 4|$.

Find more problems like this one in the §11.1 handout on p. 474, #3, 6(a,b,c), 11(c,e), 15, 17, 20, 21, 24.

#21) Find the domain of the function $f(x) = \sqrt{5 - x}$.

Find more problems like this one in the §11.1 handout on p. 474, #3(e), 6(d,e), 11.