

Answers to Pretest

#1. (a) $1/12$ (b) $9/10$ (c) $1/63$ (d) 4 (e) 54 (f) $3+2\sqrt{2}$

#2. 15

#3. $\frac{3+\sqrt{17}}{2} \approx 3.56$ Warning! When you enter this number into your calculator, you should complete

$3+\sqrt{17}$ first and then divide it by 2. If you enter $3+\sqrt{17}/2$, you will get a wrong answer.

#4. (a) $-x^3+3x+2$ (b) $-\frac{x}{6y}$ (c) $4x+2y^2$

#5. $(x-2)(x-3)$; $x=3$, $x=2$

#6. (a) $\frac{-1\pm\sqrt{5}}{2}$ (b) 0.2

#7. $-40/9$

#8. (a)-(f) all false.

For example, $(2+3)^2 = 5^2 = 25$ but $2^2 + 3^2 = 4 + 9 = 13$. So it shows that $(a+b)^2 \neq a^2 + b^2$.

In fact, $(a+b)^2 = a^2 + 2ab + b^2$ by FOIL

You can do similarly for the rest. In order to get full credit, you must show all necessary work for those problems.