

You have **20 minutes** to complete this quiz. Do the following problems **on a separate piece of paper**. Please number each problem and clearly show your work. When possible, circle your answers. **Do not write answers on this page**. When you are finished, staple this page on **top**.

1. Write in scientific notation: $0.00005141 = 5.141 \times 10^{-5}$
2. Evaluate **by using scientific notation and the laws of exponents**. Leave your answer in scientific notation.

$$\frac{(0.00028)(5,000,000,000)}{7,000,000} = 2 \times 10^{-1}$$

Perform the indicated operation and simplify your answer as much as possible.

3. $(2x^2 - 7) - (3x^2 - 4) = -x^2 - 3$
4. $(1.2x^2 - 3.4x + 6) + (5.5x^2 - 7.6x - 3) = 6.7x^2 - 11x + 3$
5. $5x(2x^2 - 6x + 3) = 10x^3 - 30x^2 + 15x$
6. $\left(\frac{4}{5}x^2 + \frac{1}{2}x\right)\left(\frac{2}{3}x\right) = \frac{8}{15}x^3 + \frac{1}{3}x^2$
7. $(2x - 4)(x + 7) = 2x^2 + 10x - 28$
8. $(x + 3)^2 = x^2 + 6x + 9$