

# What is MATH 205?

MATH 205 is a 200-level college level class designed for students pursuing Education. (Note that most programs which require MATH 205 [mostly about Geometry] also require MATH 204 [mostly about Arithmetic]. These classes may be taken in either order.) Much of the material in the course is familiar, but the level of understanding required is probably more rigorous than what you have encountered. Students with weak reading skills should consider taking an appropriate ENG course before or possibly simultaneous with this course.

- If you feel confident that you could correctly address 4 or more of these exercises, then enroll in only MATH 205.
  - If you feel less confident or think that you could only address 2 or 3 questions correctly, then enroll in MATH 205 with additional support.
  - If you feel more concerned or think that you could only address fewer than 2 exercises correctly, then you should consider enrolling in a preliminary class such as MATH 101 (or MATH 101 and MATH 101S).
1. The odds against an event  $E$  occurring is the ratio  $P(\sim E):P(E)$ . If the probability that a particular event occurs is 20%, what are the odds against that event?
  2. We are told that  $\triangle ABC$  is isosceles and that  $m\angle A = 50^\circ$ . Determine the measure of each of the other interior angles.
  3. What happens to the perimeter of a rectangle if we double each dimension? What happens to the area of a rectangle if we double each dimension?
  4. Find the value of  $x$  where
$$\mu = 74, \quad \sigma = 2.1, \quad z = 3, \quad \text{and} \quad z = \frac{x - \mu}{\sigma}.$$
  5. A right triangle has two sides of length 5 m and 12 m. Determine the length of the other side of the triangle.
  6. The midpoint of segment  $\overline{PQ}$  is the point  $M$ . If  $P$  has coordinates  $(7,11)$  and  $M$  has coordinates  $(21,12)$ , what are the coordinates of  $Q$ ?