Name_____ ~~**No Calculators**~~. **Present neatly. Score_____.**

1.

The minute hand of a clock is 8 cm long, and the hour hand is 5 cm long. How fast is the distance between the tips of the hands changing at 3 o'clock?

Your work:

Name_____ ~~**No Calculators**~~**. Present neatly. Score_____.**

1. In a triangle, side x is increasing at 2cm/s, side y is decreasing at 3 cm/s, and the angle theta formed by x and y is decreasing such that the area of the triangle has a constant value of 4cm^2.

   a) How fast is the angle changing when x=4, y=4?
   b) How fast is the third side changing when x=4, y=4?

Your work: