**Secondary Math 2 4.3 Homework Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_**

**Tangent to Circles**

1. **Find the product**

|  |  |  |  |
| --- | --- | --- | --- |
| a) | $$\left(5x+3\right)(x-2)$$ | b) | $$\left(2x+3\right)^{2}$$ |

1. **Solve for the variable. Assume that lines which appear to be tangent to the circle are tangent.**

|  |  |  |  |
| --- | --- | --- | --- |
| a) |  | b) |  |

**Review Problems:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | a) Area of $⨀A=$b) Circumference of $⨀A=$ c) Length of $\hat{BEC}=$d) Area of sector $BEC=$ |  | **What are the measures of ∠1, ∠2, ∠3** |
|  | Solve for x: |  | Find the values of *x* and *y*. |

**Extended Understanding:**

1. The peak of Mt. Everest is about 8850 m above sea level. About how many kilometers is it from the peak of Mt. Everest to the horizon if the Earth’s radius is about 6400 km? Draw a diagram to help you solve the problem.
2. **Reasoning**: $⊿GHI$ is a triangle. How can you prove that $\overbar{HI}$ is tangent to $⨀G$?

