

**Math 10 Quiz**

/6

Name \_\_\_\_\_

1. Simplify. Give *exact* answers.

a)  $3\sqrt{12} + \sqrt{75}$

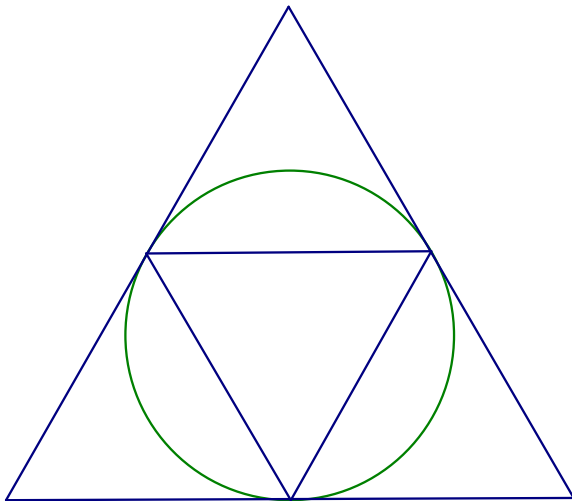
b)  $2\sqrt{20} + 3\sqrt{252} - \sqrt{45} - 4\sqrt{28}$

2. Simplify. Give *exact* answers.

a)  $\frac{3}{3 - \sqrt{6}}$

b)  $\frac{2 + \sqrt{6}}{4 + \sqrt{3}}$

3. A small equilateral triangle is inscribed in a circle, which is itself inscribed in a large equilateral triangle. The side length of the large triangle is 12. What is the area of the small triangle?



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