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6. yes; The triangles have two pairs of congruent angles.
7. no; The triangles do not have two pairs of congruent angles.
8. no; The triangles do not have the same angle measures.
9. yes; The triangles have the same angle measures, 81° , 51° , and 48° .
10. the leftmost and rightmost; They both are right triangles with 45° angles.
11. yes; The triangles have two pairs of congruent angles.
12. no; The triangles do not have two pairs of congruent angles.
13. See *Taking Math Deeper*.
14. no; Each side increases by 50%, so each side is multiplied by a factor of $\frac{3}{2}$. The area is $\frac{3}{2}\left(\frac{3}{2}\right) = \frac{9}{4}$ or 225% of the original area, which is a 125% increase.
15. 30 ft