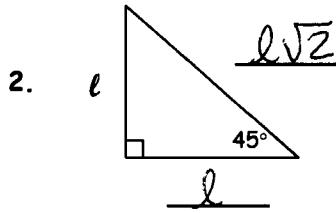
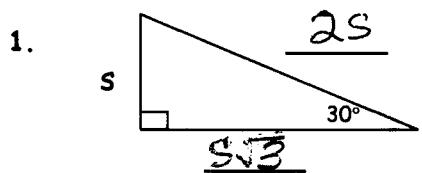


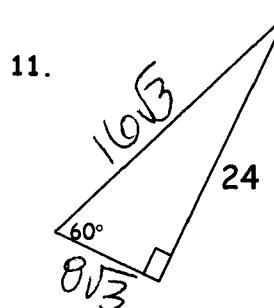
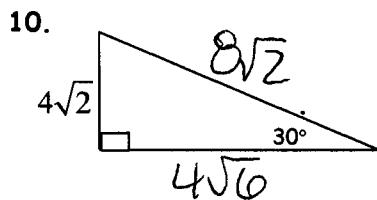
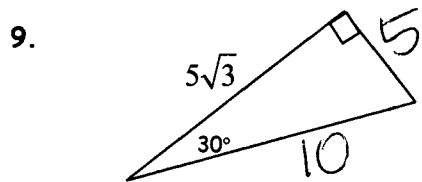
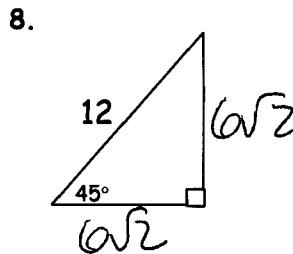
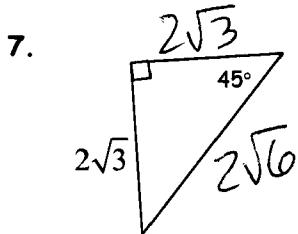
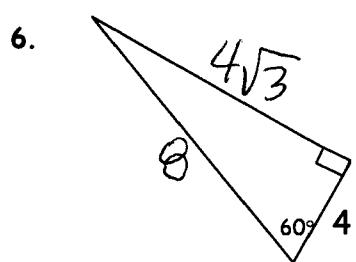
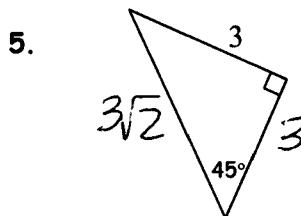
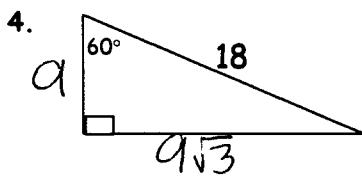
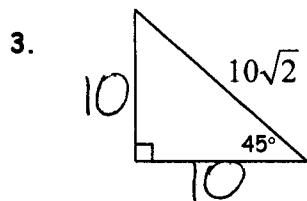
8-3 Special Right Triangles Review

Name Master G
Date _____ Block _____

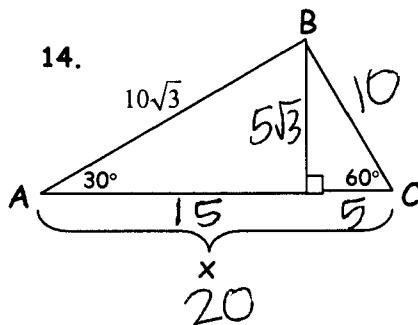
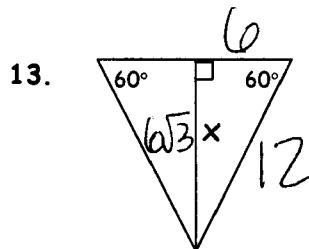
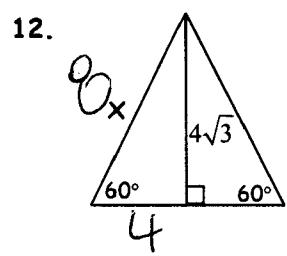
A. Fill in the formula in terms of x .



B. Fill in all missing sides on each right triangle. DO NOT USE THE CALCULATOR!

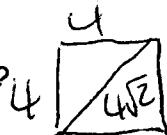


C. Find x in each picture



D. Solve. (Hint: Draw and label picture).

15. If the length of a side of a square is 4, what is the length of the diagonal?



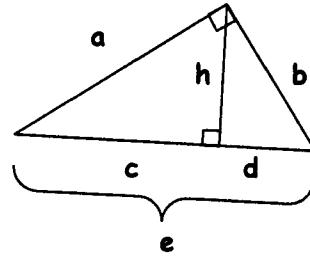
16. Find the perimeter of ΔABC in problem #14 above.

$10\sqrt{3} + 30$

8-1 Geometric Mean Review

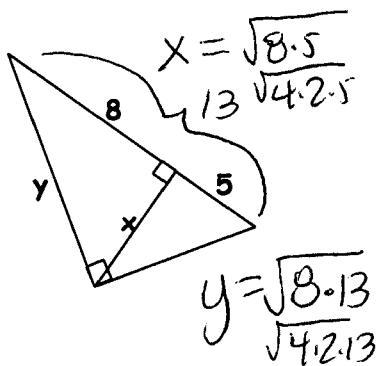
Write out the formulas for the triangle on the right.

$$a^2 = cd \quad b^2 = de \quad h^2 = cd$$

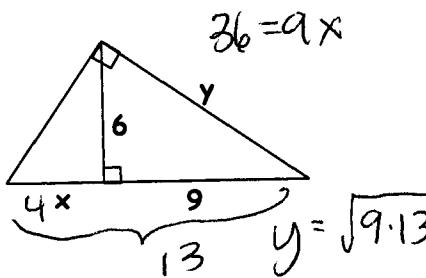


Write a proportion for each relationship and solve. Put answers in simplified radical form.

1. $x = \underline{2\sqrt{10}}$ $y = \underline{2\sqrt{26}}$



2. $x = \underline{4}$ $y = \underline{3\sqrt{13}}$



3. $x = \underline{4}$ $y = \underline{4\sqrt{3}}$

$x+12$ $x-4$
 $64 = x(x+12)$
 $64 = x^2 + 12x$
 $x^2 + 12x - 64 = 0$
 $(x+16)(x-4) = 0$
 $x = -16 \quad x = 4$

4. $x = \underline{4}$ $y = \underline{3\sqrt{5}}$

$36 = x(x+5)$
 $0 = x^2 + 5x - 36$
 $(x+9)(x-4) = 0$
 $x = -9 \quad x = 4$
 $y = \sqrt{5 \cdot 9}$

5. $x = \underline{2\sqrt{6}}$ $y = \underline{2\sqrt{15}}$

6 4
 10
 $x = \sqrt{4 \cdot 6}$
 $y = \sqrt{6 \cdot 10} = \sqrt{3 \cdot 2 \cdot 2 \cdot 5}$

6. $x = \underline{6\sqrt{5}}$ $y = \underline{8}$

18 10 x
 $x = \sqrt{10 \cdot 18}$
 $= \sqrt{5 \cdot 2 \cdot 2 \cdot 9}$

7. $x = \underline{8}$ $y = \underline{12}$

$y = \sqrt{8 \cdot 13} / \sqrt{24 \cdot 10}$
 $x+10$ x
 10 $6\sqrt{5}$
 $(6\sqrt{5})^2 = 10(x+10)$
 $180 = 10x + 100$
 $80 = 10x$
 $8 = x$

8. $x = \underline{\sqrt{14}}$ $y = \underline{5\sqrt{6}}$

6 25
 19
 x
 y
 $x = \sqrt{6 \cdot 19}$
 $y = \sqrt{6 \cdot 25}$

9. $x = \underline{2\sqrt{46}}$ $y = \underline{2\sqrt{62}}$

8 23 31
 y
 x
 $x = \sqrt{23 \cdot 2 \cdot 4}$
 $y = \sqrt{8 \cdot 31} / \sqrt{2 \cdot 4 \cdot 31}$