8-4 30-60-90 Right Triangles and 45-45 Right Triangles

Name: _____ Time› Start: _____ Finish: _____ Total Time = _____

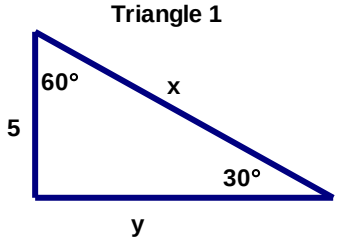
Rationalize the denominator or simplify the expression in the problems below.

_____ 1. $2\sqrt{3} \bullet 2\sqrt{5}$ _____ 2. $3\sqrt{5} \bullet 2\sqrt{5}$ _____ 3. $3\sqrt{2} \bullet \sqrt{3}$

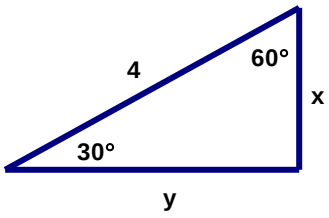
_____ 4. $\frac{2}{\sqrt{5}}$ _____ 5. $\frac{3}{\sqrt{3}}$ _____ 6. $\frac{7}{\sqrt{11}}$

Find the missing values of x and y in the triangles below. Make sure you rationalize the denominator if needed.

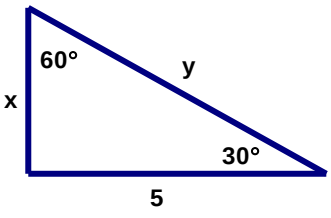
Triangle 1



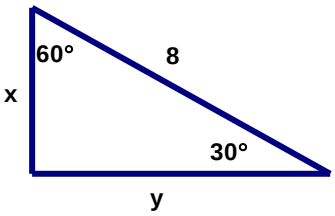
Triangle 2



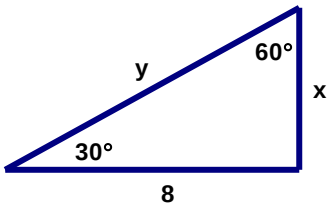
Triangle 3



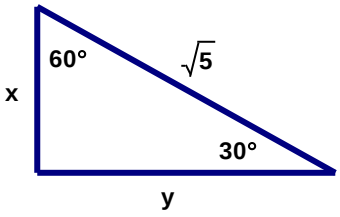
Triangle 4



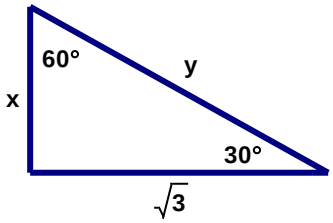
Triangle 5



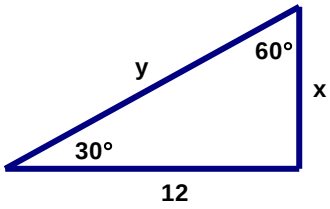
Triangle 6



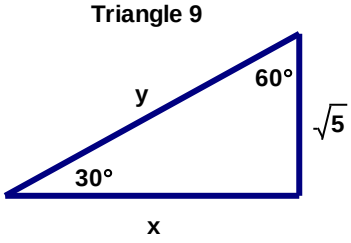
Triangle 7



Triangle 8



Triangle 9

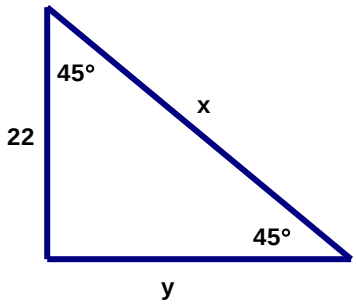


1: x = _____ y = _____ 2: x = _____ y = _____ 3: x = _____ y = _____

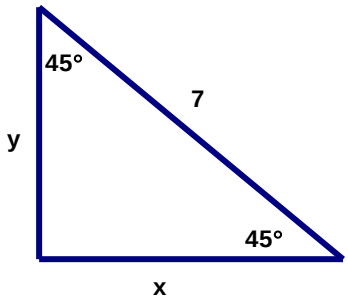
4: x = _____ y = _____ 5: x = _____ y = _____ 6: x = _____ y = _____

7: x = _____ y = _____ 8: x = _____ y = _____ 9: x = _____ y = _____

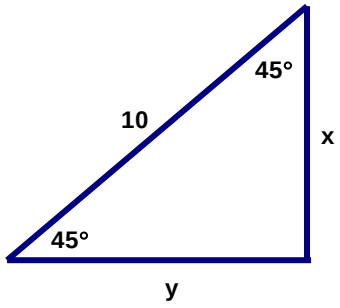
Triangle 10



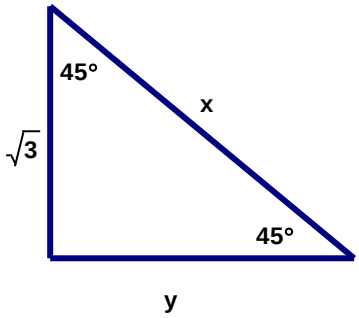
Triangle 11



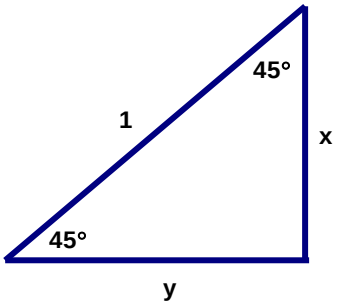
Triangle 12



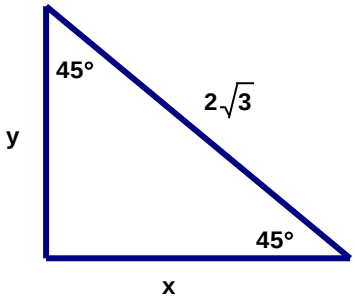
Triangle 13



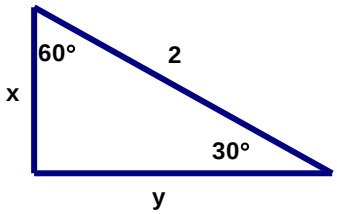
Triangle 14



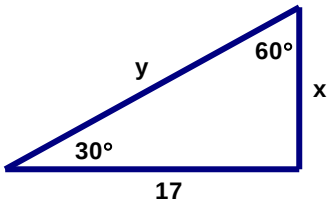
Triangle 15



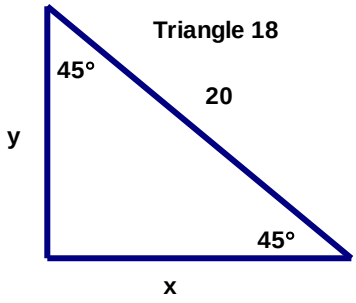
Triangle 16



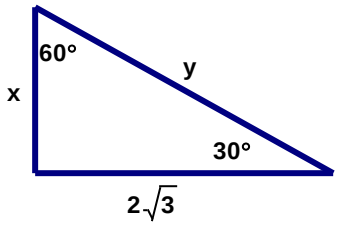
Triangle 17



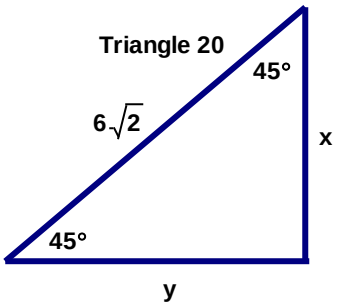
Triangle 18



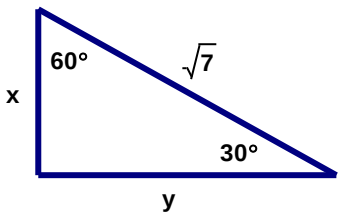
Triangle 19



Triangle 20



Triangle 21



10: x = _____ y = _____

11: x = _____ y = _____

12: x = _____ y = _____

13: x = _____ y = _____

14: x = _____ y = _____

15: x = _____ y = _____

16: x = _____ y = _____

17: x = _____ y = _____

18: x = _____ y = _____

19: x = _____ y = _____

20: x = _____ y = _____

21: x = _____ y = _____