Answer Key · Lesson 2.2: The 30-60-90 Triangle

School Launch · Trigonometry · Unit 2 · Worksheet A · for the parent

Key

1. short 3, long $3\sqrt{3}$, hyp 6

A 30-60-90 triangle has short leg 3. Find the other two sides (simplest radical form).

2. short 6, long $6\sqrt{3}$, hyp 12

A 30-60-90 triangle has short leg 6. Find the other two sides (simplest radical form).

3. short 4, long $4\sqrt{3}$, hyp 8

A 30-60-90 triangle has short leg 4. Find the other two sides (simplest radical form).

4. short 10, long $10\sqrt{3}$, hyp 20

1. short : long : hyp $= 1 : \sqrt{3} : 2$.

A 30-60-90 triangle has short leg 10. Find the other two sides (simplest radical form).

5. short $\frac{15}{2}$, long $\frac{15\sqrt{3}}{2}$, hyp 15

1. short : long : hyp $= 1 : \sqrt{3} : 2$.

A 30-60-90 triangle has hypotenuse 15. Find the other two sides (simplest radical form).

6. short 5, long $5\sqrt{3}$, hyp 10

1. short : long : hyp $= 1 : \sqrt{3} : 2$.

A 30-60-90 triangle has short leg 5. Find the other two sides (simplest radical form).

7. short 8, long $8\sqrt{3}$, hyp 16

1. short : long : hyp $= 1 : \sqrt{3} : 2$.

A 30-60-90 triangle has short leg 8. Find the other two sides (simplest radical form).

8. short 13, long $13\sqrt{3}$, hyp 26

1. short : long : hyp $= 1 : \sqrt{3} : 2$.

A 30-60-90 triangle has short leg 13. Find the other two sides (simplest radical form).

9. short $\frac{9}{2}$, long $\frac{9\sqrt{3}}{2}$, hyp 9

1. short : long : hyp $= 1 : \sqrt{3} : 2$.

A 30-60-90 triangle has hypotenuse 9. Find the other two sides (simplest radical form).

10. short $\frac{4\sqrt{3}}{3}$, long 4, hyp $\frac{8\sqrt{3}}{3}$

1. short : long : hyp $= 1 : \sqrt{3} : 2$.

A 30-60-90 triangle has long leg 4. Find the other two sides (simplest radical form).