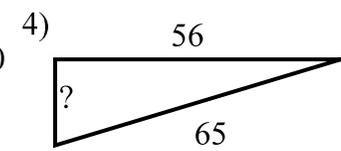
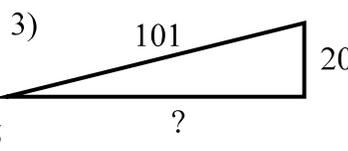
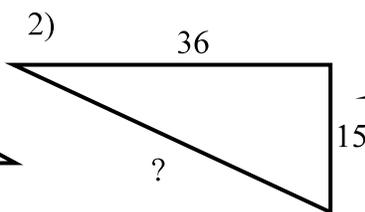
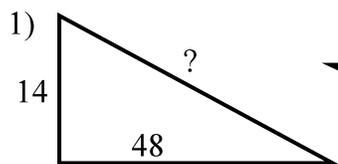


Special Triangles 2
Geometry

KEY

Find the missing length.



$$14^2 + 48^2 = c^2$$

$$196 + 2304 = c^2$$

$$2500 = c^2$$

$$c = 50$$

$$36^2 + 15^2 = c^2$$

$$1296 + 225 = c^2$$

$$1521 = c^2$$

$$39 = c$$

$$?^2 + 20^2 = 101^2$$

$$?^2 + 400 = 10201$$

$$?^2 = 9801$$

$$? = 99$$

$$?^2 + 56^2 = 65^2$$

$$?^2 + 3136 = 4225$$

$$?^2 = 1089$$

$$? = 33$$

Given the length of one side of the 45-45-90 triangle at the right find the other two sides to the nearest tenth..

5) $J = 15$

$$K = 15$$

$$L = 15\sqrt{2} = 21.2$$

6) $K = 14$

$$J = 14$$

$$L = 14\sqrt{2} = 19.8$$

7) $K = 6$

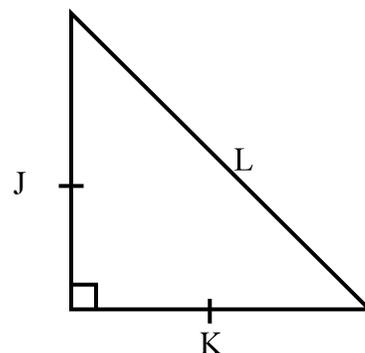
$$J = 6$$

$$L = 6\sqrt{2} = 8.5$$

8) $L = 20\sqrt{2}$

$$J = \frac{20\sqrt{2}}{\sqrt{2}} = 20$$

$$K = 20$$



9) $L = 11\sqrt{2}$

$$J = \frac{11\sqrt{2}}{\sqrt{2}} = 11$$

$$K = 11$$

10) $J = 3\sqrt{2}$

$$K = 3\sqrt{2} = 4.2$$

$$L = 3\sqrt{2}(\sqrt{2}) = 3*2 = 6$$

11) $L = 18$

$$K = \frac{18}{\sqrt{2}} = 12.7$$

$$J = 12.7$$

12) $J = 17$

$$K = 17$$

$$L = 17\sqrt{2} = 24.0$$

13) $K = 10\sqrt{2}$

$$J = 10\sqrt{2} = 14.1$$

$$L = 10\sqrt{2}(\sqrt{2}) = 10*2 = 20$$

14) $L = 8$

$$K = \frac{8}{\sqrt{2}} = 5.7$$

$$J = 5.7$$

Given the length of one side of the 30-60-90 triangle at the right find the other sides to the nearest tenth.

$$15) \quad U = 5 \\ V = 5(2) = 10$$

$$T = 5(\sqrt{3}) = 8.7$$

$$16) \quad U = 15 \\ V = 15(2) = 30$$

$$T = 15(\sqrt{3}) = 26$$

$$17) \quad V = 16 \\ U = 16/2 = 8$$

$$T = 8(\sqrt{3}) = 13.9$$

$$18) \quad T = 12\sqrt{3} \\ U = \frac{12\sqrt{3}}{\sqrt{3}} = 12$$

$$V = 12(2) = 24$$

$$19) \quad U = 9 \\ V = 9(2) = 18$$

$$T = 9(\sqrt{3}) = 15.6$$

$$20) \quad V = 32 \\ U = 32/2 = 16$$

$$T = 16(\sqrt{3}) = 27.7$$

$$21) \quad T = 7\sqrt{3}$$

$$U = \frac{7\sqrt{3}}{\sqrt{3}} = 7$$

$$V = 7(2) = 14$$

$$22) \quad U = 2\sqrt{3}$$

$$V = 2\sqrt{3}(2) = 4\sqrt{3} = 6.9$$

$$T = 2\sqrt{3}(\sqrt{3}) = 2(\sqrt{9}) = 2(3) = 6$$

$$23) \quad U = 13\sqrt{3}$$

$$V = 13\sqrt{3}(2) = 26\sqrt{3} = 45$$

$$T = 13\sqrt{3}(\sqrt{3}) = 13(\sqrt{9}) = 13(3) = 39$$

$$24) \quad T = 17$$

$$U = \frac{17}{\sqrt{3}} = 9.8$$

$$V = \frac{17}{\sqrt{3}}(2) = \frac{34}{\sqrt{3}} = 19.6$$

