Find the correct answer to each of the following, and write the answer in the blank provided.


| 7. | Find the value of ' $y$ '. |
| :---: | :---: |
| 8. | A helicopter is hovering over a landing pad 100 m from where you are standing. The helicopter's angle of elevation with the ground is $12^{\circ}$. What is the altitude of the helicopter? |
| 9. | An airplane climbs at an angle of $18^{\circ}$ with the ground. Find the ground distance the plane travels as it rises to an altitude of 2500 ft . |
| 10. | A guy wire reaches from the top of a 120 ft television transmitter tower to the ground. The wire makes a $63^{\circ}$ angle with the ground. Find the length of the guy wire. |
| 11. | To secure a tailgating tent, a 64-inch cord is extended from the top of a vertical pole to the ground. If the cord makes a $60^{\circ}$ angle with the ground, how tall is the pole? |
| 12. | A tree's shadow is 4.8 m long on level ground. The angle of elevation from the tip of the shadow to the sun is $50^{\circ}$. Which is closest to the height of the tree? |

