|  |  |  |
| --- | --- | --- |
| **Unit 3 Test Study Guide** | Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ S: \_\_\_\_\_ | |
| **Sin = \_\_\_\_\_ Cos = \_\_\_\_\_ Tan = \_\_\_\_\_** | | |
| ***Use the triangle to the right for questions 1-5.***  1.  2. Tan C =  3. Sin A =  4. Find  5. Find |  | |
| 6. In , where , . Find cos *A*. Draw a diagram. | | |
| ***Find the missing side or angle in the following triangles*** | | |
| **7.** | **8.** | |
| **9.** | **10.** | |
| 11. The top of a waterslide is 14 ft above the ground. The angle of depression from the top of the water slide to the ground is 220. How long is the slide? |  | |
|  | | |
|  | | |
| 12. A forest ranger is on a fire lookout tower in a national forest. His observation post is 214 ft above the ground. He spots a fire. The angle of depression from his line of sight to the fire is 120. How far away is the fire from the lookout tower in terms of line of sight? | |  |
| 13. Find angles X and Z. | |  |
|  | |  |
| 16. Find ST. | | |
|  | |  |
|  | | |
|  | |  |
|  | |  |