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| **Unit 3 Test Study Guide** | Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ S: \_\_\_\_\_ |
| **Sin = \_\_\_\_\_ Cos = \_\_\_\_\_ Tan = \_\_\_\_\_** |
| ***Use the triangle to the right for questions 1-5.***1. $\overbar{BC}=$2. Tan C = 3. Sin A =4. Find $m∠A$5. Find $m∠C$ |  |
| 6. In $∆ABC$, where $∠ACB=90°$, $\sin(A= \frac{4}{5})$. 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? |  |
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| 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. |  |
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| 16. Find ST. |
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