Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| Use the following to review for you test. Work the Practice Problems on a separate sheet of paper. | | | |
| What you need to know & be able to do | Things to remember |  |  |
| A. Perform a dilation with a given scale factor | When the center of dilation is the origin, you can multiply each coordinate of the original figure, or pre- image, by the scale factor to find the coordinates of the dilated figure, or image. | 1. Dilate with k = ½. | 2. Dilate with k = 2. |
| B. Find the missing side for similar figures. | Set up a proportion by matching up the corresponding sides. Then, solve for x. | 3. | 4. |
|  |  | 5. | 6. |
| C. Midsegment Theorem | The segment connecting the midpoints of two sides of the triangle is parallel to the third side and 1/2 the length of the third side. | 5. Find PQ and TP | 6. Solve for x. |
| D. Determine if 2 triangles are similar, and write the similarity statement. | Remember the 3 ways that you can do this: AA, SAS, SSS | 7. ΔGNK ~ \_\_\_\_\_\_ by\_\_\_\_\_\_ | 8. ΔABC ~ \_\_\_\_\_\_ by\_\_\_\_\_\_ |
| E. Find sin, cos, and tan ratios | Just find the fraction  using SOHCAHTOA | 22  18  14  **B**  **A**  **C** | **9.** Find sin A. |
| **10.** Find tan B. |
| **11.** Find cos B. |
| **12.** Find tan A. |
| F. Know the relationship between the ratios for complementary angles. |  | **13.** Given Right ΔABC and , find . | |
| G. Use trig to find a missing side measure | Set up the ratio and then use your calculator.  If the variable is on the top, multiply.  If the variable is on the bottom, divide. | **14.** Find f.  25°  7  **f** | **15.** Find m.  43  **m**  85° |
| H. Use trig to find a missing angle measure | Tap the trig button twice to get the INVERSE then type in the ratio. | **16.** Find p.    **p°**  13  40 | **17.** Find s.  **s°**  32  17 |
| I. Trig Word Problems | Draw the picture. Label the sides.  Set up the ratio, and solve. | **18.** From 25 feet away from the base of a building, the angle of elevation from the ground to the top of a building is measured to be 38°. How tall is the building? | |
| **19.** A kite is 35 feet in the air and the string forms an angle of 62° with the ground. How long is the string? | |