**NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ BLOCK: \_\_\_\_\_\_ DATE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**MATH 10 – TRIGONOMETRY ASSIGNMENT**

**PART 1: Identify Opposite, Adjacent and Hypotenuse**

1. Identify the side opposite to <Z. \_\_\_\_\_\_\_\_ X Z

2. Identify the side adjacent to <Z. \_\_\_\_\_\_\_\_

Y

3. Identify the sides that are opposite and adjacent to <H. H

Opposite \_\_\_\_\_\_\_

Adjacent \_\_\_\_\_\_\_

T U

4. How long is the side opposite <C? \_\_\_\_\_\_\_

5. How long is the hypotenuse? \_\_\_\_\_\_\_ A

6. What is sin C = \_\_\_\_\_\_\_\_ ? (fraction)

7. How long is the side adjacent to <C? \_\_\_\_\_\_\_ 12 13

8. What is cos C = \_\_\_\_\_\_\_\_ ? (fraction)

B 9 C

9. What is cos H? \_\_\_\_\_\_\_ (fraction) D 4 H

10. What is sin H? \_\_\_\_\_\_\_

11. What is tan G? \_\_\_\_\_\_\_ 3 5

12. What is sin G? \_\_\_\_\_\_\_

G

**PART 2: SIN, COS, TAN PROBLEMS**

M 8 L

13. What side is adjacent to <L? \_\_\_\_\_\_

14. What is the hypotenuse? \_\_\_\_\_\_\_ 6 10

15. Calculate cos L. \_\_\_\_\_\_\_\_\_\_(3 dec. pl.)

16. Calculate cos N. \_\_\_\_\_\_\_\_ (3 dec. pl.) N

17. Find the sine, cosine and tangent of <R. (3 decimal places)

a) sin R = \_\_\_\_\_\_\_\_ R 9 B

b) cos R = \_\_\_\_\_\_\_\_

c) tan R = \_\_\_\_\_\_\_\_

13 12

T

**PART 3 – MISSING PIECES**

18. What is the side represented by x? T

19. If <R = 25o

a) How much is x? (1 dec. pl.) x

WORK ANSWER

B 18 R

b) How long is the hypotenuse? (1 dec. pl.)

WORK ANSWER

20. Find the indicated side to one decimal place.

WORK

x

ANSWER

63

3

21. a) Use trigonometry to find side LN. L

WORK ANSWER 14

M 48 N

b) Use the Pythagorean Theorem to check that your answer in a) is correct

WORK ANSWER