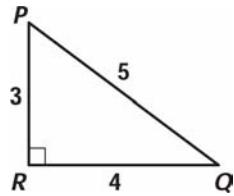


Name _____ Date _____ Class _____

Lesson 2 Worksheet 2

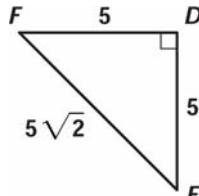
Trigonometric Ratios

Part I: Find the value of the sine, cosine, and tangent ratios for each triangle below. Be sure to show your work and give both a fraction and a decimal answer for each one. Simplify fractions and radicals and round decimals to 2 places.



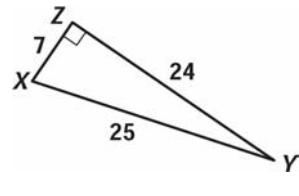
Fraction Decimal

1. $\sin P = \underline{\hspace{2cm}} \quad \underline{\hspace{2cm}}$



Fraction Decimal

7. $\sin F = \underline{\hspace{2cm}} \quad \underline{\hspace{2cm}}$



Fraction Decimal

13. $\sin X = \underline{\hspace{2cm}} \quad \underline{\hspace{2cm}}$

2. $\cos P = \underline{\hspace{2cm}} \quad \underline{\hspace{2cm}}$

8. $\cos F = \underline{\hspace{2cm}} \quad \underline{\hspace{2cm}}$

14. $\cos X = \underline{\hspace{2cm}} \quad \underline{\hspace{2cm}}$

3. $\tan P = \underline{\hspace{2cm}} \quad \underline{\hspace{2cm}}$

9. $\tan F = \underline{\hspace{2cm}} \quad \underline{\hspace{2cm}}$

15. $\tan X = \underline{\hspace{2cm}} \quad \underline{\hspace{2cm}}$

4. $\sin Q = \underline{\hspace{2cm}} \quad \underline{\hspace{2cm}}$

10. $\sin D = \underline{\hspace{2cm}} \quad \underline{\hspace{2cm}}$

16. $\sin Y = \underline{\hspace{2cm}} \quad \underline{\hspace{2cm}}$

5. $\cos Q = \underline{\hspace{2cm}} \quad \underline{\hspace{2cm}}$

11. $\cos D = \underline{\hspace{2cm}} \quad \underline{\hspace{2cm}}$

17. $\cos Y = \underline{\hspace{2cm}} \quad \underline{\hspace{2cm}}$

6. $\tan Q = \underline{\hspace{2cm}} \quad \underline{\hspace{2cm}}$

12. $\tan D = \underline{\hspace{2cm}} \quad \underline{\hspace{2cm}}$

18. $\tan Y = \underline{\hspace{2cm}} \quad \underline{\hspace{2cm}}$

Part II: Find the following ratios (decimal answers rounded to 2 decimal places) ratio for each of the following using a calculator. Make sure that the calculator is set to degree mode.

19. $\sin 10^\circ = \underline{\hspace{2cm}}$ 27. $\cos 10^\circ = \underline{\hspace{2cm}}$ 35. $\tan 10^\circ = \underline{\hspace{2cm}}$

20. $\sin 20^\circ = \underline{\hspace{2cm}}$ 28. $\cos 20^\circ = \underline{\hspace{2cm}}$ 36. $\tan 20^\circ = \underline{\hspace{2cm}}$

21. $\sin 30^\circ = \underline{\hspace{2cm}}$ 29. $\cos 30^\circ = \underline{\hspace{2cm}}$ 37. $\tan 30^\circ = \underline{\hspace{2cm}}$

22. $\sin 40^\circ = \underline{\hspace{2cm}}$ 30. $\cos 40^\circ = \underline{\hspace{2cm}}$ 38. $\tan 40^\circ = \underline{\hspace{2cm}}$

23. $\sin 50^\circ = \underline{\hspace{2cm}}$ 31. $\cos 50^\circ = \underline{\hspace{2cm}}$ 39. $\tan 50^\circ = \underline{\hspace{2cm}}$

24. $\sin 60^\circ = \underline{\hspace{2cm}}$ 32. $\cos 60^\circ = \underline{\hspace{2cm}}$ 40. $\tan 60^\circ = \underline{\hspace{2cm}}$

25. $\sin 70^\circ = \underline{\hspace{2cm}}$ 33. $\cos 70^\circ = \underline{\hspace{2cm}}$ 41. $\tan 70^\circ = \underline{\hspace{2cm}}$

26. $\sin 80^\circ = \underline{\hspace{2cm}}$ 34. $\cos 80^\circ = \underline{\hspace{2cm}}$ 42. $\tan 80^\circ = \underline{\hspace{2cm}}$

43. ***Think about it!*** Why are sine and cosine ratios always less than 1, but tangents are not?