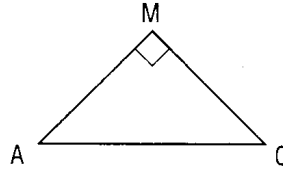A second example of a **trigonometric ratio** is the **sine** ratio.

In a right triangle, the sine ratio of an acute angle is defined as

$$\frac{\text{side opposite the angle}}{\text{hypotenuse}}.$$

In $\triangle MAC$, the sine ratio of $\angle A$ is $\frac{MC}{AC}$.

In $\triangle MAC$, the sine ratio of $\angle C$ is $\frac{AM}{AC}$.

Use a calculator to find the sine of each angle, to three decimal places.

1. 62° _____   2. 21° _____

3. 85° _____   4. 45° _____

5. 5° _____   6. 70° _____

Find $\angle B$, to the nearest degree.

7. sin B = 0.990 ____   8. sin B = 0.208 ____

9. sin B = 0.500 ____   10. sin B = 1.000 ____

11. sin B = 0.345 ____   12. sin B = 0.755 ____

Find $\angle G$, to the nearest degree.

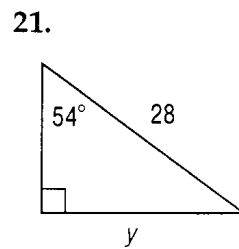13. sin G = $\frac{1}{2}$ ____   14. sin G = $\frac{2}{5}$ ____

15. sin G = $\frac{4}{5}$ ____   16. sin G = $\frac{5}{8}$ ____

17. sin G = $\frac{1}{11}$ ____   18. sin G = $\frac{8}{9}$ ____

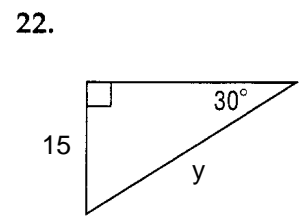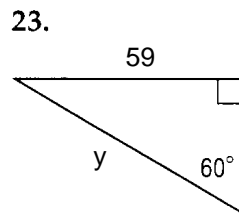*Calculate* $\sin Y, \angle Y, \sin X$ *and* $\angle X$. *Round each angle measure to the nearest degree.*

19.

20.
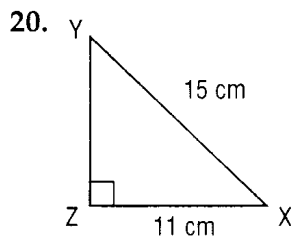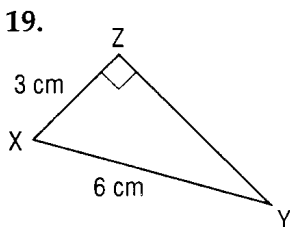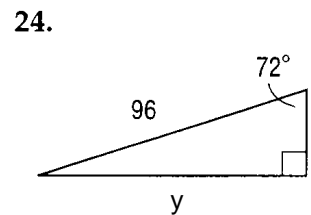

Calculate y, to the nearest hundredth of a metre.

21.

22.

23.

24.

25.

26.