

The Weekly Rigor

No. 110

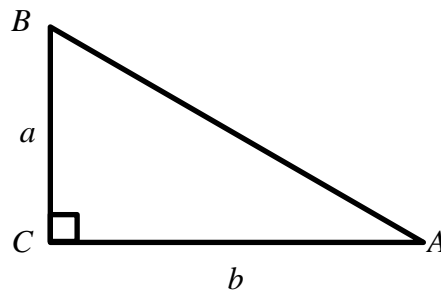
“A mathematician is a machine for turning coffee into theorems.”

July 30, 2016

SAT Math Test Problem Children: Trigonometry (Part 3)

PROBLEMS

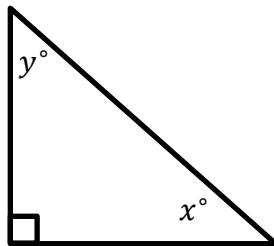
1.



Given the right triangle ABC above, which of the following is equal to $\frac{a}{b}$?

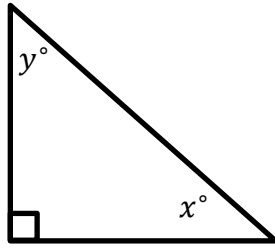
- A) $\sin A$
- B) $\sin B$
- C) $\tan A$
- D) $\tan B$

2.



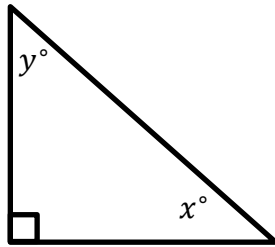
In the triangle above, the sine of x° is 0.8. What is the cosine of y° ?

3.



In the triangle above, the cosine of x° is 0.6. What is the sine of y° ?

4.



In the triangle above, the sine of x° is 0.4. What is the cosine of $90^\circ - x^\circ$?

5. In a right triangle, one angle measures x° , where $\sin x^\circ = \frac{1}{2}$. What is $\cos(90^\circ - x^\circ)$?

6. In a right triangle, one angle measures x° , where $\sin x^\circ = \frac{4}{5}$. What is $\cos(90^\circ - x^\circ)$?

“Only he who never plays, never loses.”