

TB(2B) Ch. 12 Trigonometric Ratios

Multiple Choice Questions

1. [13-14 S.6 Mock Exam #23]

In $\triangle ABC$, $AB : BC : CA = 40 : 9 : 41$. Find $\tan A \times \tan C$.

- A. $\frac{81}{1600}$
- B. $\frac{1600}{1681}$
- C. 1
- D. 2

2. [13-14 Final Exam #6]

If $\cos \theta = \sin 20^\circ - \tan 14^\circ$, then $\theta =$

- A. 1.00° .
- B. 5.32° .
- C. 70.2° .
- D. 84.7° .

3. [14-15 Final Exam #10]

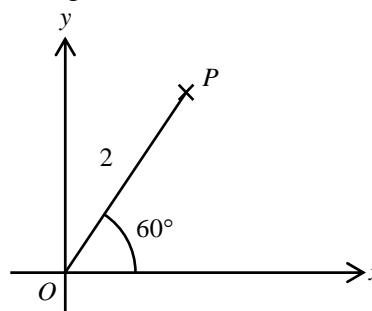
Which of the following is true?

- A. $\sin 30^\circ + \sin 60^\circ = \sin 90^\circ$
- B. $\sin 30^\circ + \cos 60^\circ = \tan 45^\circ$
- C. $\sin 30^\circ + \cos 60^\circ = \tan 80^\circ$
- D. $\cos 30^\circ + \cos 60^\circ = \cos 90^\circ$

4. [15-16 Final Exam #18]

If the polar coordinates of a point P are $(2, 60^\circ)$, then the rectangular coordinates of P are

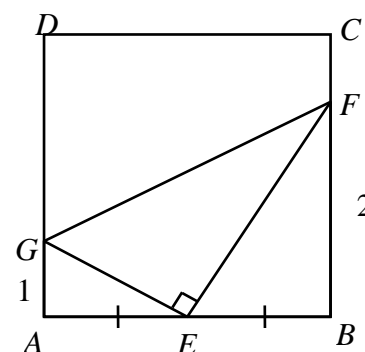
- A. $(1, \sqrt{3})$.
- B. $(1, 2)$.
- C. $(\sqrt{3}, 1)$.
- D. $(2, \sqrt{3})$.



5. [15-16 Final Exam #19]

In the figure, $ABCD$ is a square. E is the mid-point of AB , G and F lies on AD and BC respectively. If $AG = 1$, $BF = 2$ and $\angle GEF = 90^\circ$, then $GF =$

- A. $\sqrt{3}$.
- B. $\sqrt{7}$.
- C. 3.
- D. 4.



6. [15-16 Final Exam #20]

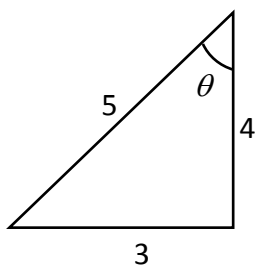
In a right-angled triangle ABC , the hypotenuse $AC = 13$ cm. What is the largest possible area of $\triangle ABC$?

- A. 13 cm^2
- B. 30 cm^2
- C. 42.25 cm^2
- D. 84.5 cm^2

7. [16-17 Final Exam #12]

Find the value of $\cos \theta \times \tan \theta$.

- A. $\frac{3}{5}$
- B. $\frac{3}{4}$
- C. $\frac{4}{5}$
- D. 1

**8. [17-18 Final Exam #9]**

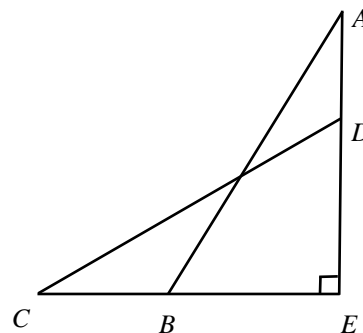
In the figure, $\angle GHS = 90^\circ$, $GH = 8$ cm, $HS = 15$ cm and $GS = 17$ cm. Find the value of $\tan \theta$.

- A. $\frac{15}{17}$
- B. $\frac{8}{17}$
- C. $\frac{8}{15}$
- D. $\frac{15}{8}$

9. [17-18 Final Exam #15]

In the figure, CBE and ADE are straight lines, $AB = CD = 65$, $AD = 21$, $AE = 60$ and $\angle E = 90^\circ$. Find BC .

- A. 21
- B. 23
- C. 25
- D. 27



~ End ~