TB(2B) Ch. 12 Trigonometric Ratios
Multiple Choice Questions

1. [12-13 S.2 Final Exam #14]

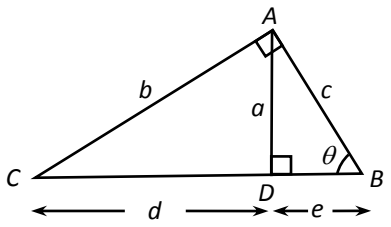
In the figure, ΔABC is a right-angled triangle and $AD \perp BC$.

Which of the following are correct?

I. $\sin\theta = \frac{c}{a}$

II. $\tan\theta = \frac{a}{e}$

III. $\cos\theta = \frac{c}{d+e}$



A. I and II only **B.** I and III only
C. II and III only **D.** I, II and III

2. [13-14 S.6 Mock Exam #23]

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

A. $\frac{81}{1600}$

B. $\frac{1600}{1681}$

C. 1

D. 2

3. [13-14 Final Exam #6]

If $\cos\theta$ = $\sin 20° - \tan 14°$, then θ =

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

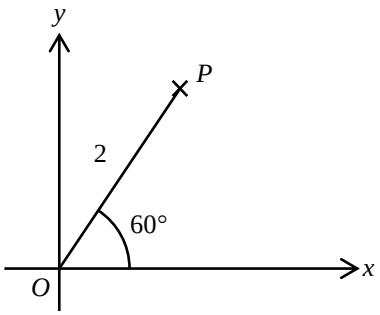
4. [14-15 Final Exam #10]

Which of the following is true?

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

5. [15-16 Final Exam #18]

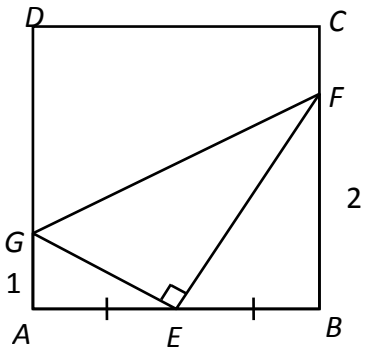
If the polar coordinates of a point P are $(2, 60°)$, then the rectangular coordinates of P are



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

6. [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 $\angle GEF = 90°$, then $GF =$



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

7. [15-16 Final Exam #20]

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

A. $13\ \text{cm}^2$
B. $30\ \text{cm}^2$
C. $42.25\ \text{cm}^2$
D. $84.5\ \text{cm}^2$

~ End ~