

# ANSWERS TO "TRIG PRACTICE TEST"

- side  $c = 15.65$  units
- side  $b = 12$  units
- a)  $\sin(A) = \frac{1}{2}$  or  $0.5$     b)  $\cos A = \frac{\sqrt{75}}{10} \approx 0.866$   
c)  $\tan(B) = \frac{\sqrt{75}}{5} \approx 1.732$     d)  $m\angle B = 60^\circ$
- side  $a \approx 5.57$
- side  $c \approx 5.32$
- $\cos^{-1}(0.691) = 46.29^\circ \approx 46^\circ$
- $\angle C \approx 30^\circ$  ; side  $b = 47.88$  ;  $\angle B = 104.66^\circ \approx 105^\circ$   
(depending on roundings)
- $x \approx 24.49$
- $x = \tan^{-1}\left(\frac{8}{25}\right) \approx 18^\circ$
- height  $\approx 43.3$  m up
- $b \approx 8.67$  TLAR
- $\theta \approx 35^\circ$  TLAR?
- Bonus:  $x = 4.5$
- side  $x = 7.82$  TLAR
- $73.25^\circ \approx 73^\circ$
- $a = 7.0887\dots$  ;  $\angle B = 42.22^\circ$  ,  $\angle C \approx 180 - 102.72 \approx 78^\circ$

If you don't get the same answer it may be because I intentionally did it wrong to get you thinking!