

Trig: Exact Values solutions
Green Section

1. $\frac{1}{2}$
2. $\frac{\sqrt{3}}{2}$
3. $\frac{\sqrt{3}}{3}$
4. $\frac{\sqrt{3}}{2}$
5. $\frac{1}{2}$
6. $\sqrt{3}$
7. $\frac{\sqrt{2}}{2}$
8. $\frac{\sqrt{2}}{2}$
9. 1
10. 1
11. 0
12. 0
13. 0
14. 1

Yellow Section

1. $\cos x = \frac{4}{8} = \frac{1}{2} \Rightarrow x = \cos^{-1}\left(\frac{1}{2}\right) = 60$
2. $\sin x = \frac{8}{16} = \frac{1}{2} \Rightarrow x = \sin^{-1}\left(\frac{1}{2}\right) = 30$
3. $\tan x = \frac{9}{9} = 1 \Rightarrow x = \tan^{-1}(1) = 45$
4. $\sin x = \frac{0.5}{1} = \frac{1}{2} \Rightarrow x = 30$
5. $\cos x = \frac{2.1}{4.2} = \frac{1}{2} \Rightarrow x = 60$
6. $\tan x = \frac{3}{3} = 1 \Rightarrow x = 45$

Red Section

1. $\sin 30 = \frac{x}{11} \Rightarrow x = 11 \sin 30 \Rightarrow 11 \times \frac{1}{2} \Rightarrow x = 5.5$
2. $\cos 60 = \frac{3.2}{x} \Rightarrow x = \frac{3.2}{\cos 60} \Rightarrow x = \frac{3.2}{0.5} = 6.4$
3. $\tan 45 = \frac{x}{5} \Rightarrow x = 5 \tan 45 \Rightarrow x = 5 \times 1 \Rightarrow x = 5$
4. $\cos 60 = \frac{9}{x} \Rightarrow x = \frac{9}{\cos 60} \Rightarrow x = \frac{9}{0.5} = x = 18$
5. $\sin 30 = \frac{x}{17} \Rightarrow x = 17 \sin 30 \Rightarrow x = 17 \times \frac{1}{2} \Rightarrow x = 8.5$
6. $\tan 45 = \frac{x}{9.1} \Rightarrow x = 9.1 \tan 45 \Rightarrow x = 9.1 \times 1 \Rightarrow x = 9.1$

Apply

1. 1
2. 1
3. 0.5
4. 1.5
5. 1.5

6. 1.5

7. 0

8. 1

9. $\sin 60 = \frac{\sqrt{3}}{2}$

10. $\cos 45 = \frac{1}{\sqrt{2}} = \frac{\sqrt{2}}{2}$