

SM2H 8.1 Answers

1) 8.66

2)  $6\sqrt{3}$

3) 7.98

4)  $\sin\theta = \frac{12}{13}$

$\cos\theta = \frac{5}{13}$

$\tan\theta = \frac{12}{5}$

$\csc\theta = \frac{13}{12}$

$\sec\theta = \frac{13}{5}$

$\cot\theta = \frac{5}{12}$

5)  $\sin\theta = \frac{\sqrt{2}}{2}$

$\cos\theta = \frac{\sqrt{2}}{2}$

$\tan\theta = 1$

$\csc\theta = \sqrt{2}$

$\sec\theta = \sqrt{2}$

$\cot\theta = 1$

6)  $\sin\theta = .89$

$\cos\theta = .45$

$\tan\theta = 2$

$\csc\theta = 1.12$

$\sec\theta = 2.24$

$\cot\theta = .5$

7)  $\cos 49 = \frac{x}{9.5}$

$x = 6.2$

8)  $x = 7.6$

9)  $x = 12.5$

10)  $x = 6.1$

11)  $x = 12.4$

12)  $x = 0.8$

13)  $\sin\theta = \frac{3}{5}$

$\cos\theta = \frac{4}{5}$

$\tan\theta = \frac{3}{4}$

$\csc\theta = \frac{5}{3}$

$\sec\theta = \frac{5}{4}$

$\cot\theta = \frac{4}{3}$

14)  $\sin\theta = \frac{4\sqrt{97}}{97}$

$\sin\theta = \frac{9\sqrt{97}}{97}$

$\tan\theta = \frac{4}{9}$

$\csc\theta = \frac{\sqrt{97}}{4}$

$\sec\theta = \frac{\sqrt{97}}{9}$

$\cot\theta = \frac{9}{4}$

15) .8480

16) .3256

17) .0699

18) 19.0811

19) .4848

20) .7880

21) 1.0154

22) 9.5668

23) 1

24)  $\frac{5\sqrt{3}}{11}$

25) 7

26)  $\frac{5}{12}$

27)  $\frac{3}{5}$

28)  $\frac{8\sqrt{73}}{73}$

29) 2

30)  $x=5.16\text{m}, 7.37\text{m}$

31) 769.27ft

32) 261.08ft

33) 5.6

34) 13.5

35) 6.8