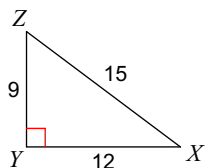


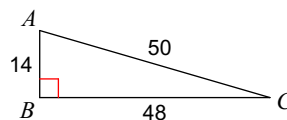
WS 18.1: Tangent and Inverse Tangent Ratios

Find the value of each trigonometric ratio as a fraction and then rounding to the nearest hundredth.

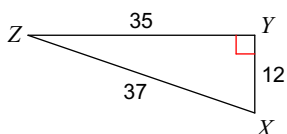
1)  $\tan X$



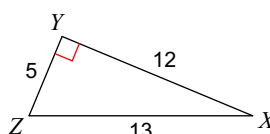
2)  $\tan C$



3)  $\tan X$



4)  $\tan X$



Find the value of each trigonometric ratio to the nearest ten-thousandth.

5)  $\tan 15^\circ$

6)  $\tan 17^\circ$

7)  $\tan 73^\circ$

8)  $\tan 13^\circ$

9)  $\tan 59^\circ$

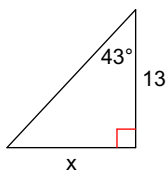
10)  $\tan 80^\circ$

11)  $\tan 42^\circ$

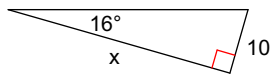
12)  $\tan 8^\circ$

Find the missing side. Round to the nearest tenth.

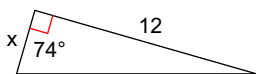
13)



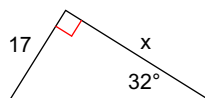
14)

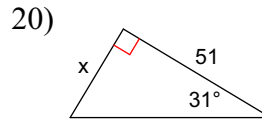
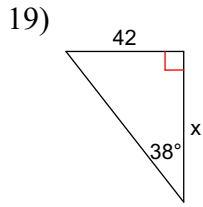
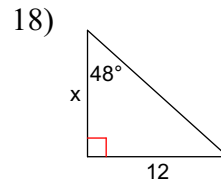
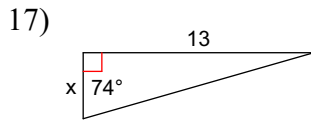


15)



16)





**Find each angle measure to the nearest degree.**

21)  $\tan A = 8.1443$

22)  $\tan Z = 0.4452$

23)  $\tan B = 1.0000$

24)  $\tan Z = 57.2900$

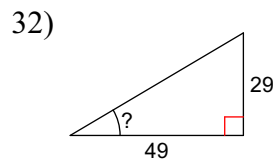
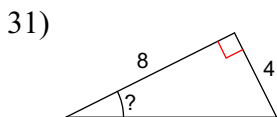
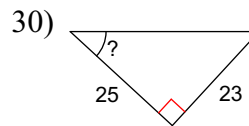
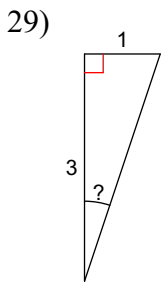
25)  $\tan C = 0.4877$

26)  $\tan V = 6.3138$

27)  $\tan B = 5.1446$

28)  $\tan C = 0.4452$

**Find the measure of the indicated angle to the nearest degree.**



## Answers to WS 18.1: Tangent and Inverse Tangent Ratios

1)  $\frac{3}{4}$

5) 0.2679

9) 1.6643

13) 12.1

17) 3.7

21)  $83^\circ$

25)  $26^\circ$

29)  $18^\circ$

2)  $\frac{7}{24}$

6) 0.3057

10) 5.6713

14) 34.9

18) 10.8

22)  $24^\circ$

26)  $81^\circ$

30)  $43^\circ$

3)  $\frac{35}{12}$

7) 3.2709

11) 0.9004

15) 3.4

19) 53.8

23)  $45^\circ$

27)  $79^\circ$

31)  $27^\circ$

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

8) 0.2309

12) 0.1405

16) 27.2

20) 30.6

24)  $89^\circ$

28)  $24^\circ$

32)  $31^\circ$