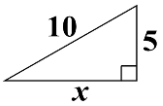
Name: _____ Per: ____

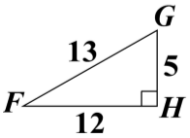
Unit 5 Practice Test B

1. Determine the value of *x*. Write your answer as a simplified radical.



Answer:

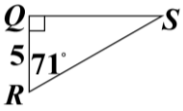
2. Select all trigonometric ratios that correctly describe the relationships on the given triangle.



A. $sinF = \frac{5}{13}$	F. $cosG = \frac{5}{13}$
B. $sinG = \frac{12}{13}$	G. $tanF = \frac{5}{13}$
C. $sinG = \frac{12}{5}$	H. $tanH = \frac{5}{12}$
D. $cosF = \frac{5}{13}$	I. $tanH = \frac{12}{5}$
E. $cosF = \frac{12}{13}$	J. $tanG = \frac{12}{5}$

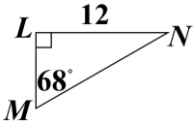
Answer:

3. Use a trigonometric ratio to determine the length of QS to the nearest tenth.



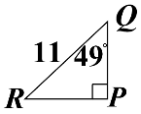
Answer:

4. Use a trigonometric ratio to determine the length of LM to the nearest tenth.



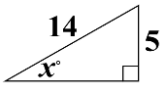
Answer:

5. Use a trigonometric ratio to determine the length of PQ to the nearest tenth.



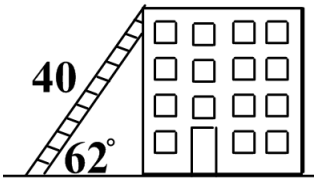
Answer:

6. Determine the value of x to the nearest degree.



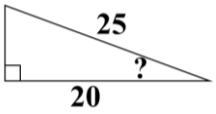
Answer:

7. A painter leans a 40-foot long ladder against a building. The angle of elevation of the ladder is 62°. How tall is the building? Write your answer as a decimal to the nearest foot.



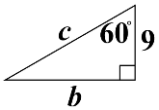
Answer:

8. The specifications for a wheel ramp are shown below. What would the angle of elevation of the ramp have to be, and how would you determine it?



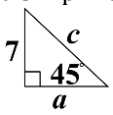
Answer:

9. Find the length of all missing sides. Write your answer as a simplified radical.



Answer:

10. Find the length of all missing sides. Write your answer as a simplified radical.



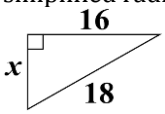
Answer:

1. $x = 5\sqrt{3}$	2. A, B, E, F, J	3. $QS = 14.5$	4. $LM = 4.8$	5. $PQ = 7.2$
6. $x = 21°$	7. 35 ft	8. 37° using cosine	9. $b = 9\sqrt{3}; c = 18$	10. $a = 7; c = 7\sqrt{2}$

Name: _____ Per: ____

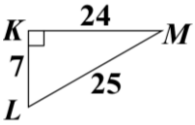
Unit 5 Practice Test C

1. Determine the value of *x*. Write your answer as a simplified radical.



Answer:

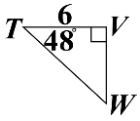
2. Select all trigonometric ratios that correctly describe the relationships on the given triangle.



A. $sinL = \frac{24}{7}$	F. $cosM = \frac{7}{25}$
B. $sinL = \frac{7}{25}$	G. $cosM = \frac{7}{24}$
C. $sinM = \frac{7}{25}$	H. $tanL = \frac{24}{7}$
D. $sinM = \frac{7}{24}$	I. $tanL = \frac{7}{24}$
E. $cosL = \frac{7}{25}$	J. $tanM = \frac{7}{24}$

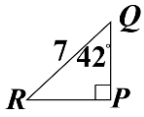
Answer:

3. Use a trigonometric ratio to determine the length of TW to the nearest tenth.



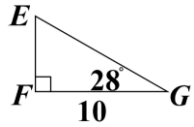
Answer:

4. Use a trigonometric ratio to determine the length of RP to the nearest tenth.



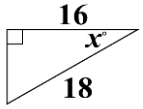
Answer:

5. Use a trigonometric ratio to determine the length of EF to the nearest tenth.



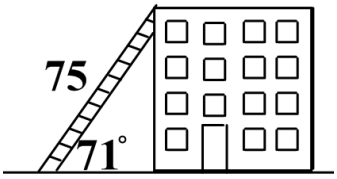
Answer:

6. Determine the value of x to the nearest degree.



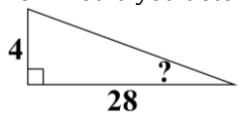
Answer:

7. A handyman leans a 75-foot long ladder against a building. The angle of elevation of the ladder is 71°. How tall is the building? Write your answer as a decimal to the nearest foot.



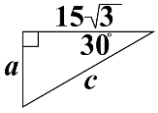
Answer:

8. The specifications for a wheel ramp are shown below. What would the angle of elevation of the ramp have to be, and how would you determine it?



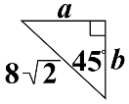
Answer:

9. Find the length of all missing sides. Write your answer as a simplified radical.



Answer:

10. Find the length of all missing sides. Write your answer as a simplified radical.



Answer:

1. $x = 2\sqrt{17}$	2. C, E, H, J	3. $TW = 9.0$	4. $RP = 4.7$	5. $EF = 5.3$
6. $x = 27°$	7. 71 ft	8. 8° using tangent	9. $a = 15; c = 30$	10. $a = 8; b = 8$