

4.1.1 – 4.1.5
 Trigonometry: Right Triangles
 - Tangent Ratio

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32. The directions for assembling the pool state that the ladder should be placed at an angle of 75° relative to level ground. Which of the following expressions involving tangent gives the distance, in feet, that the bottom of the ladder should be placed away from the bottom edge of the pool in order to comply with the directions?

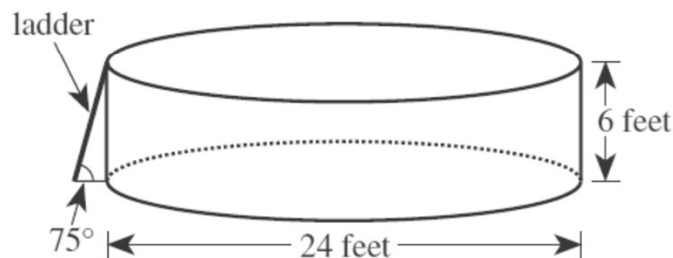
F. $\frac{6}{\tan 75^\circ}$

G. $\frac{\tan 75^\circ}{6}$

H. $\frac{1}{6 \tan 75^\circ}$

J. $6 \tan 75^\circ$

K. $\tan(6 \cdot 75^\circ)$



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50. In the right triangle below, the measure of $\angle C$ is 90° , $AB = 5$ units, and $CB = 2$ units. What is $\tan B$?

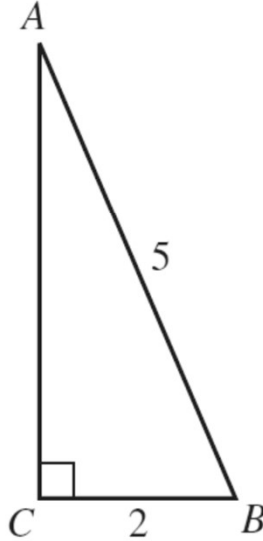
F. $\frac{\sqrt{21}}{2}$

G. $\frac{3}{2}$

H. $\frac{\sqrt{21}}{5}$

J. $\frac{3}{5}$

K. $\frac{2}{5}$



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33. In triangle $\triangle DEF$ shown below, $\tan D = \frac{4}{9}$ and segment \overline{FE} measures 18 inches. To the nearest tenth of an inch, what is the measure of segment \overline{DF} ?

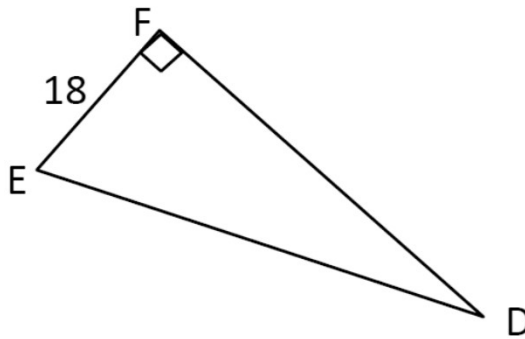
A. 8

B. 27

C. 36.3

D. 40.5

E. 44.3



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