

6. A 28-foot ladder is leaning against a house. The bottom of the ladder is 6 feet from the base of the house. Find the measure of the angle formed by the ladder and the ground, to the *nearest degree*.

7. A 20-foot support post leans against a wall, making a 70° angle with the ground. To the *nearest tenth of a foot*, how far up the wall will the support post reach?

- 1) 6.8
- 2) 6.9
- 3) 18.7
- 4) 18.8

8. A man standing on level ground is 1000 feet away from the base of a 350-foot-tall building. Find, to the *nearest degree*, the measure of the angle of elevation to the top of the building from the point on the ground where the man is standing.

9. A ladder leans against a building. The top of the ladder touches the building 10 feet above the ground. The foot of the ladder is 4 feet from the building. Find, to the *nearest degree*, the angle that the ladder makes with the level ground.

10. In $\triangle ABC$, the measure of $\angle B = 90^\circ$, $AC = 50$, $AB = 48$, and $BC = 14$. Which ratio represents the tangent of $\angle A$?

- 1) $\frac{14}{50}$ 3) $\frac{48}{50}$
2) $\frac{14}{48}$ 4) $\frac{48}{14}$

11. In right triangle EFD , $ED = 11$, $EF = 6$, and $m\angle F = 90$. What is the measure of angle E , to the *nearest degree*?

12. In right triangle ABC shown below, $AC = 29$ inches, $AB = 17$ inches, and $m\angle ABC = 90$. Find the number of degrees in the measure of angle BAC , to the *nearest degree*. Find the length of \overline{BC} to the *nearest inch*.