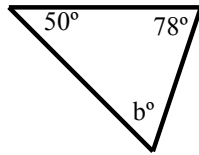


1. Find the value of angle b.

① ② ③ ④ ⑤

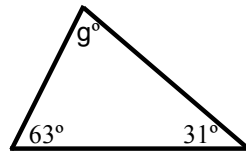
- (1) 52°
- (2) 62°
- (3) 128°
- (4) 130°
- (5) 145°



2. Find the value of angle g.

① ② ③ ④ ⑤

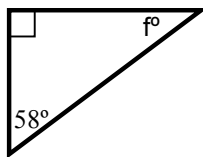
- (1) 74°
- (2) 86°
- (3) 94°
- (4) 87°
- (5) 45°



3. Find the value of angle f.

① ② ③ ④ ⑤

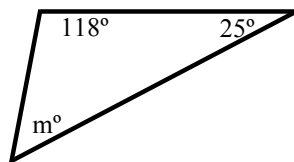
- (1) 28°
- (2) 32°
- (3) 90°
- (4) 95°
- (5) 180°



4. Find the value of angle m.

① ② ③ ④ ⑤

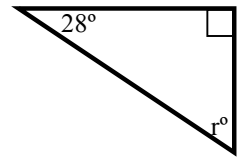
- (1) 30°
- (2) 37°
- (3) 62°
- (4) 82°
- (5) 102°



5. Find the value of angle r.

① ② ③ ④ ⑤

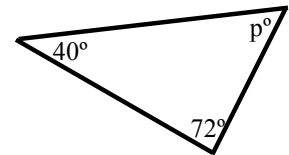
- (1) 35°
- (2) 45°
- (3) 62°
- (4) 82°
- (5) 112°



6. Find the value of angle p.

① ② ③ ④ ⑤

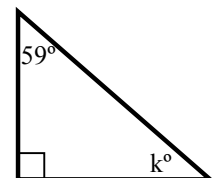
- (1) 68°
- (2) 75°
- (3) 112°
- (4) 135°
- (5) 150°



7. Find the value of angle k.

① ② ③ ④ ⑤

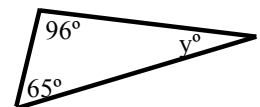
- (1) 20°
- (2) 26°
- (3) 31°
- (4) 81°
- (5) 134°



8. Find the value of angle y.

① ② ③ ④ ⑤

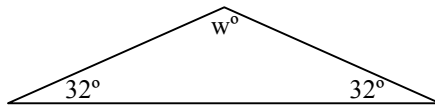
- (1) 12°
- (2) 19°
- (3) 21°
- (4) 45°
- (5) 75°



9. Find the value of $\angle w$.

① ② ③ ④ ⑤

- (1) 64°
 (2) 116°
 (3) 145°
 (4) 160°
 (5) 180°



10. In triangle XYZ, $\angle X = 45^\circ$ and $\angle Y = 52^\circ$.

What is the value of $\angle Z$?

① ② ③ ④ ⑤

- (1) 83°
 (2) 93°
 (3) 97°
 (4) 116°
 (5) 145°

11. In triangle MNO, angle N is a **right angle**. Angle O is equal to 35° . What is the value of Angle M?

① ② ③ ④ ⑤

- (1) 45°
 (2) 55°
 (3) 90°
 (4) 110°
 (5) 125°

12. In $\triangle TUV$, each of two angles is equal to 38° . What is the value of the third angle?

① ② ③ ④ ⑤

- (1) 38°
 (2) 83°
 (3) 104°
 (4) 115°
 (5) 148°

13. The vertex angle of an isosceles triangle is 80° . What is the value of each base angle?

① ② ③ ④ ⑤

- (1) 50°
 (2) 100°
 (3) 150°
 (4) 163°
 (5) 177°

14. Two of the angles in a scalene triangle measure 28° and 57° . What does the third angle measure?

① ② ③ ④ ⑤

- (1) 90°
 (2) 95°
 (3) 105°
 (4) 119°
 (5) 125°

15. Al's triangular shape is an isosceles right triangle. What is the value of each base angle?

① ② ③ ④ ⑤

- (1) 35°
 (2) 40°
 (3) 45°
 (4) 68°
 (5) 102°

16. Henry's wooden block is in the shape of a triangle. One angle measures 32° and another angle measures 17° . What is the value of the third angle?

① ② ③ ④ ⑤

- (1) 31°
 (2) 100°
 (3) 131°
 (4) 142°
 (5) 165°

17. In a **scalene right triangle**, one angle is equal to 35° . Find the value of the third angle.

① ② ③ ④ ⑤

- (1) 40°
(2) 45°
(3) 55°
(4) 130°
(5) 160°

18. If the three sides of triangle CDE are **equal**, what is the value of each angle?

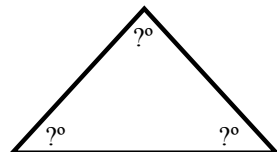
① ② ③ ④ ⑤

- (1) 45°
(2) 60°
(3) 75°
(4) 85°
(5) 180°

19. A billiard's ball rack is shaped like a triangle with three **equal** sides. What is the **total** value of all three angles?

① ② ③ ④ ⑤

- (1) 60°
(2) 90°
(3) 120°
(4) 125°
(5) 180°



20. The roof gable on a house has two equal sides. One angle measures 112° . The other two angles are equal to each other. Find the value of those two angles.

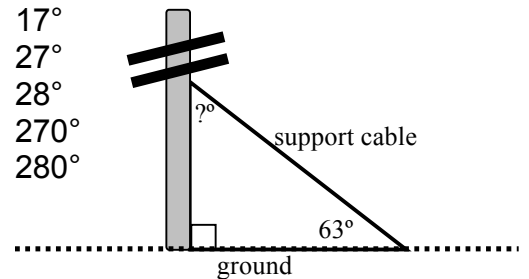
① ② ③ ④ ⑤

- (1) 28°
(2) 34°
(3) 43°
(4) 73°
(5) 93°

21. The support cable for a telephone pole makes an angle of 63° with the ground, and the telephone pole makes a 90° angle with the ground. What angle does the support cable make with the pole?

① ② ③ ④ ⑤

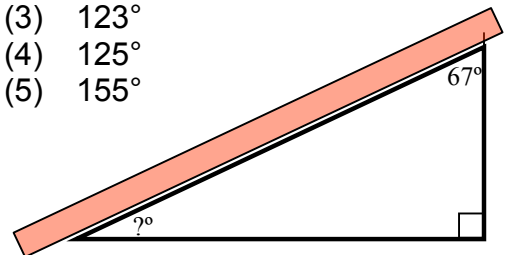
- (1) 17°
(2) 27°
(3) 28°
(4) 270°
(5) 280°



22. To properly cut the greenhouse roof side piece, what is the third angle Joyce needs to know?

① ② ③ ④ ⑤

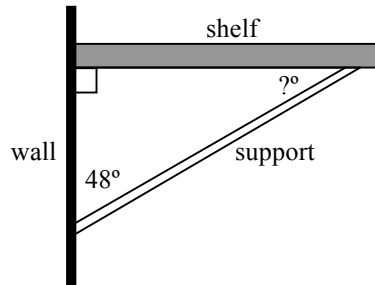
- (1) 13°
(2) 23°
(3) 123°
(4) 125°
(5) 155°



23. A shelf support makes an angle of 48° with the wall. What is the value of the angle the support makes with the shelf?

① ② ③ ④ ⑤

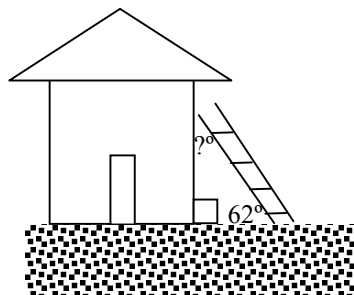
- (1) 42°
(2) 48°
(3) 90°
(4) 95°
(5) 128°



24. Steven leaned a ladder against the house. If the ladder makes an angle of 62° with the ground, what angle does it make with the house?

① ② ③ ④ ⑤

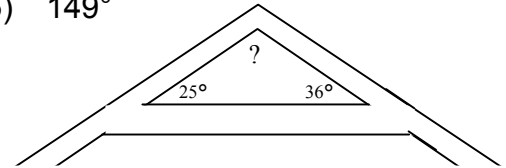
- (1) 28°
(2) 38°
(3) 45°
(4) 85°
(5) 90°



25. What is the value of the unmeasured angle in this triangle?

① ② ③ ④ ⑤

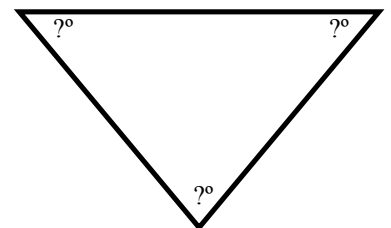
- (1) 19°
(2) 29°
(3) 119°
(4) 132°
(5) 149°



26. A blanket pattern requires pieces of colored cloth in the shape of a triangle. Each triangle is to have three equal angles and three equal sides. What is the value of each of the three **equal** angles in a triangle?

① ② ③ ④ ⑤

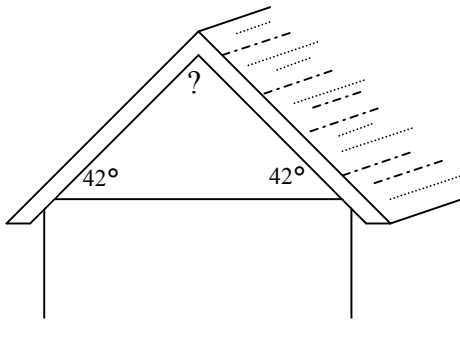
- (1) 45°
(2) 60°
(3) 90°
(4) 138°
(5) 145°



27. What is the value of the unmeasured roof angle in the drawing below?

① ② ③ ④ ⑤

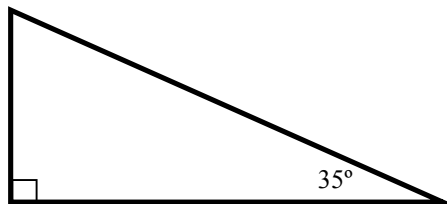
- (1) 42°
 (2) 38°
 (3) 96°
 (4) 110°
 (5) 116°



28. A blanket design calls for a triangular piece of material. If one angle is a right angle and a second angle is 35° , what is the value of the third angle?

① ② ③ ④ ⑤

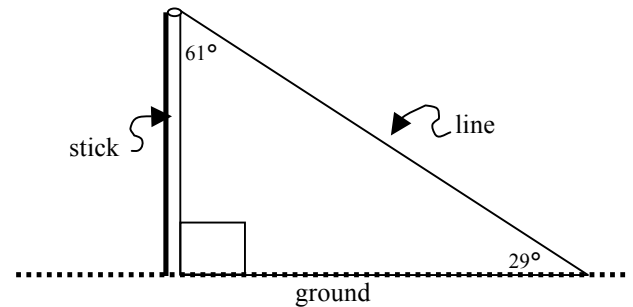
- (1) 45°
 (2) 55°
 (3) 60°
 (4) 65°
 (5) 75°



29. Al drove a stick straight into the ground. He dropped a line from the top of the stick and anchored it into the ground in front of the stick. What angle does the stick make with the ground?

① ② ③ ④ ⑤

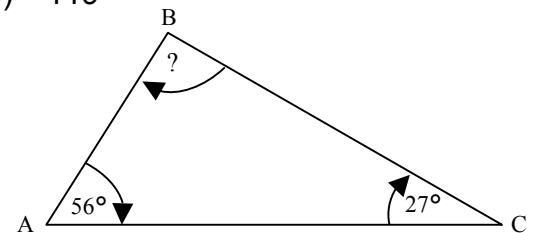
- (1) 90°
 (2) 125°
 (3) 130°
 (4) 150°
 (5) 180°



30. What is the value of $\angle B$?

① ② ③ ④ ⑤

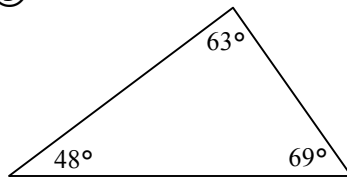
- (1) 19°
 (2) 90°
 (3) 97°
 (4) 107°
 (5) 119°



31. Identify triangle EFG.

① ② ③ ④ ⑤

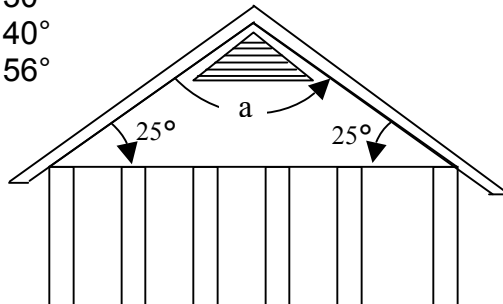
- (1) equilateral
- (2) isosceles
- (3) right
- (4) scalene
- (5) isosceles and scalene



32. What is the top roof angle (angle a) in the drawing below?

① ② ③ ④ ⑤

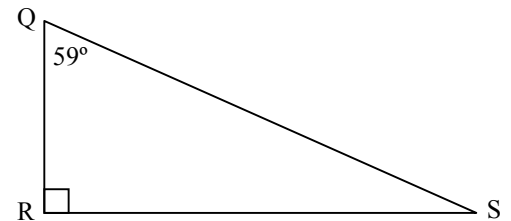
- (1) 25°
- (2) 50°
- (3) 130°
- (4) 140°
- (5) 156°



34. What kind of triangle is triangle QRS?

① ② ③ ④ ⑤

- (1) equilateral
- (2) isosceles
- (3) right/isosceles
- (4) scalene
- (5) right/scalene triangle



33. The sum of two angles in a triangle is 117°. What is the value of the third angle?

① ② ③ ④ ⑤

- (1) 36°
- (2) 63°
- (3) 93°
- (4) 111°
- (5) 117°