Bases & Heights of Triangles

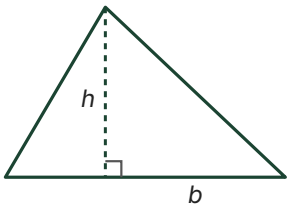
ANSWER KEY • Amplify Alignment: Grade 6 Accelerated, Unit 1, Lesson 6

1. Select all the statements that are true about triangles.

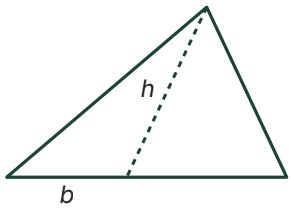
- ☑ **A.** Any side of a triangle can be a base.
- ☐ **B.** The height must always be drawn inside the triangle.
- ☑ **C.** A height is always perpendicular to its base (or to a line that extends the base).
- ☑ **D.** A height is sometimes drawn outside the triangle.
- ☐ **E.** The height is always one of the sides of the triangle.

2. Select all the triangles that have a correct height labeled for the given base.

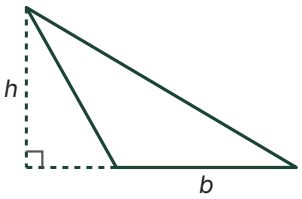
☑ **A.**



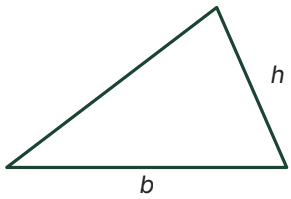
☐ **B.**



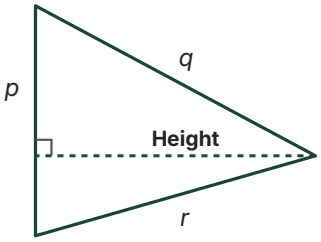
☑ **C.**



☐ **D.**



3. Which side is the matching base for the height shown in the triangle?

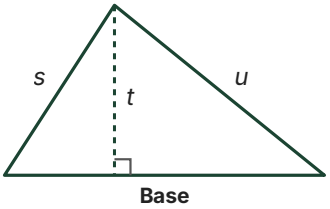


(A) Side *p*

B Side *q*

C Side *r*

4. Which is a height that matches the base of this triangle?

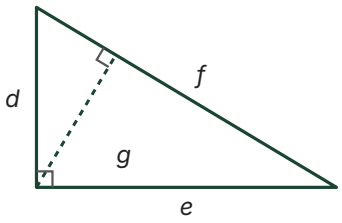


A Side *s*

B Length *t*

C Side *u*

5. This is a right triangle. Name a matching height for each base.

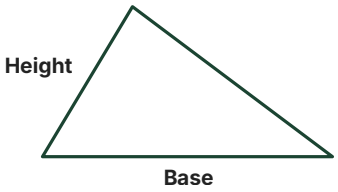


a Base: side *d* Height: **side *e***

b Base: side *e* Height: **side *d***

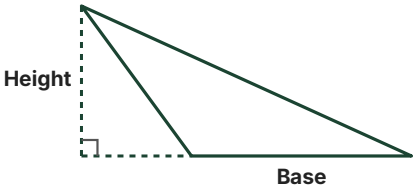
c Base: side *f* Height: **length *g***

6. Noah labeled the base and height of this triangle. Are Noah's labels correct? Explain your thinking.



No. The side he labeled "Height" is not perpendicular to the base. A height must meet the base (or its extension) at a right angle.

7. Mia labeled the base and height of this triangle. Are Mia's labels correct? Explain your thinking.



Yes. The height is drawn from the opposite vertex and meets the extended base at a right angle. It is outside the triangle, which is allowed.