

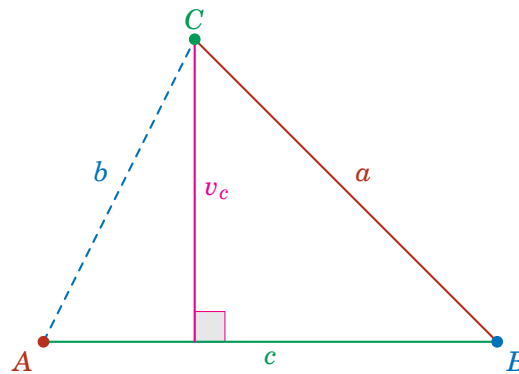
# Math Exam – PrelB 3.AB

## Pythagorean Theorem

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1. You're given the following triangle:



Calculate the length of  $b$  if you know that  $a = \sqrt{45}$ ,  $c = 8$  and  $v_c = 3$ .

2. Calculate the distance between  $(2, 0, -1)$  and  $(3, -3, 1)$  by altering the coordinates in the following order:
- (a)  $y, z, x$ ;
  - (b)  $z, y, x$ .

Remember,  $x$  is the first coordinate,  $y$  is the second and  $z$  the third. **Draw the triangles you're using to perform the calculations.**