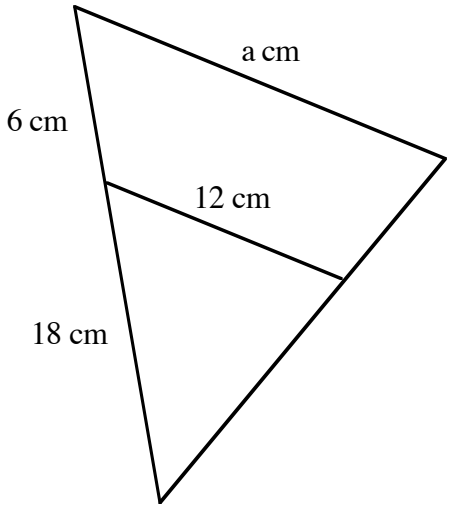
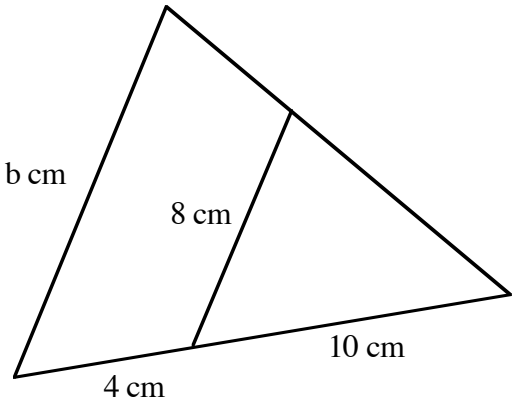
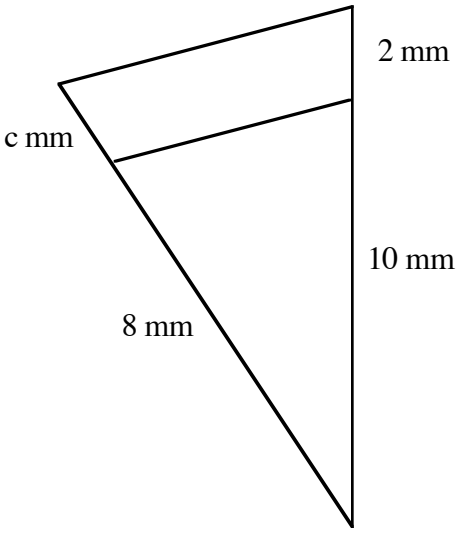
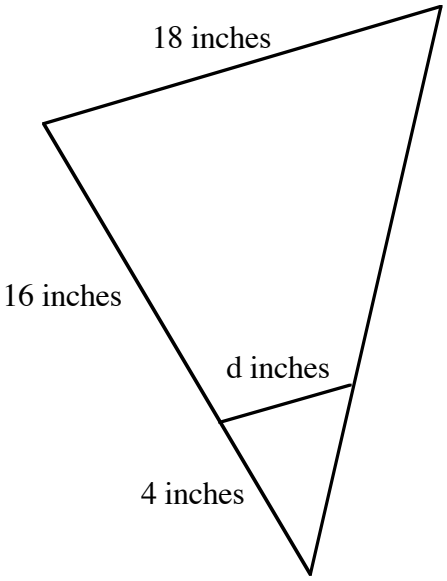
Similar Shapes: Triangles 2

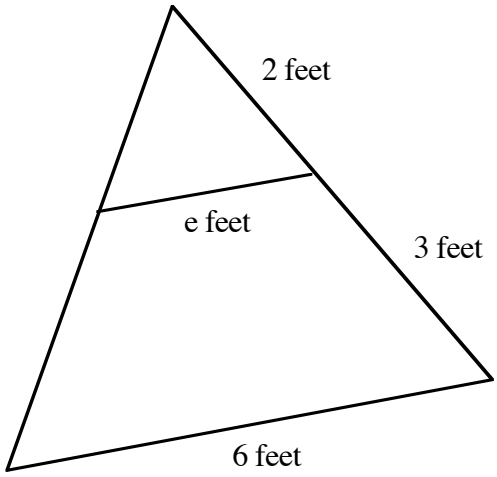
1. In each of the following diagrams find the length of the unknown side.

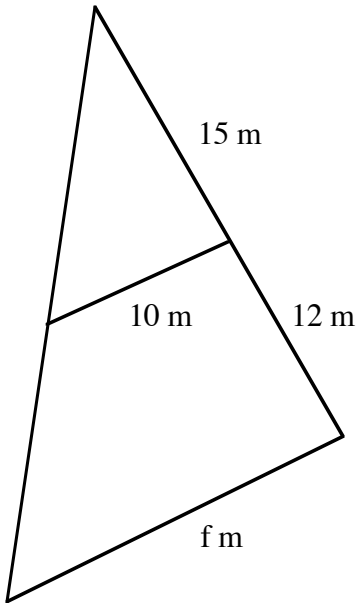


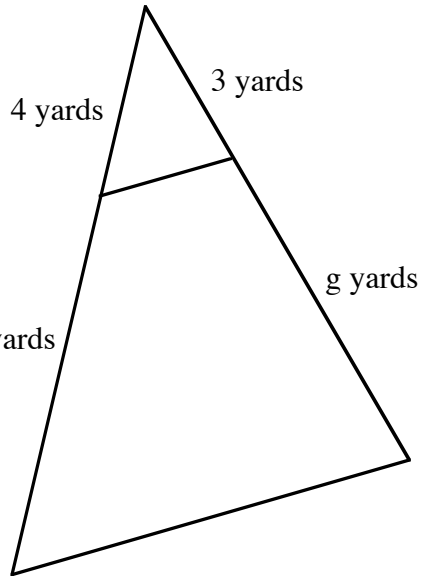


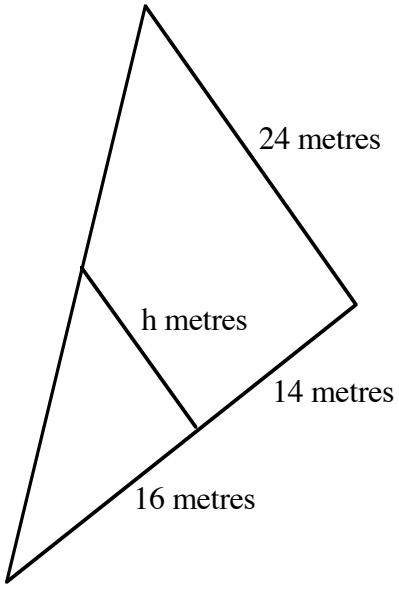


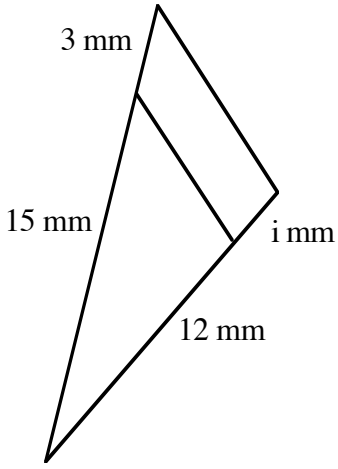




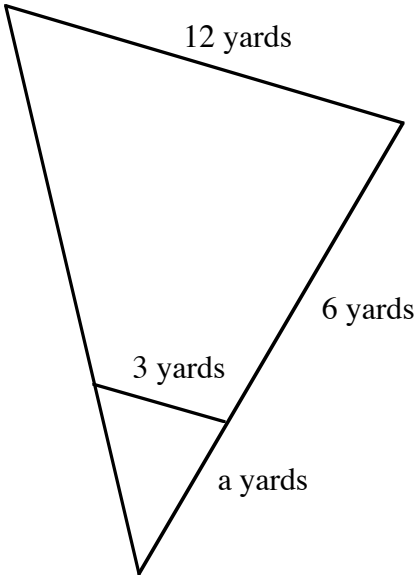


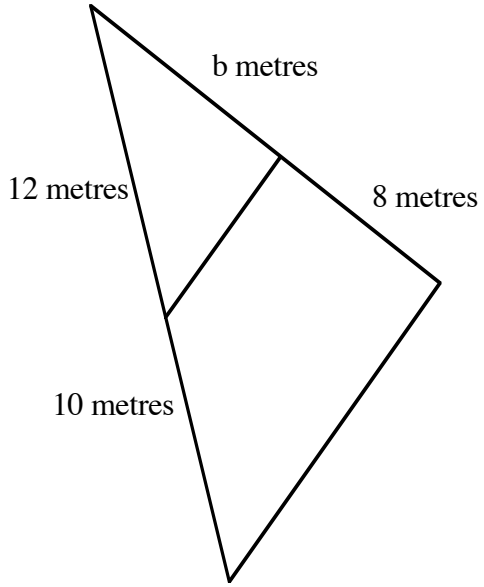


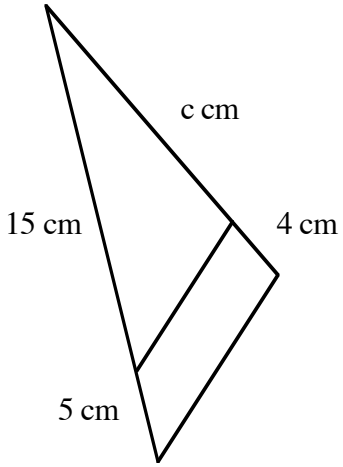


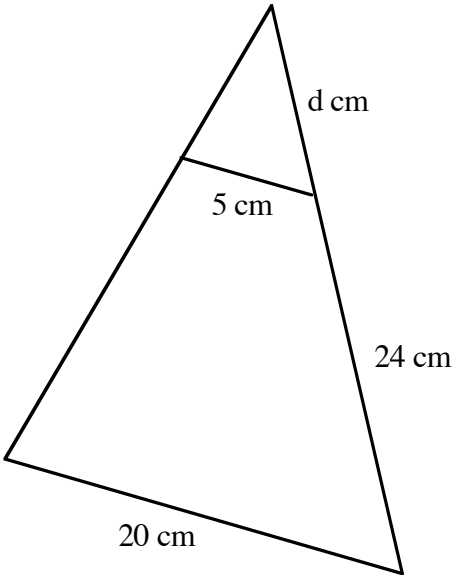


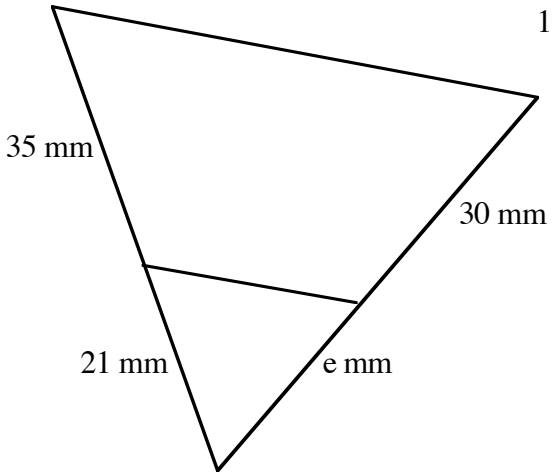
2. In each of the following diagrams find the length of the unknown side.

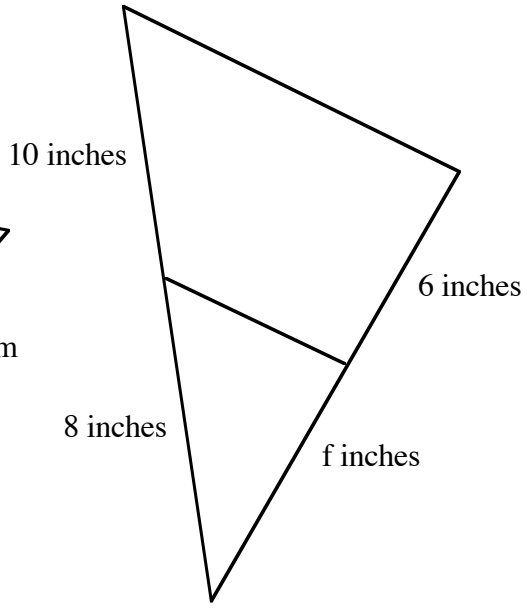


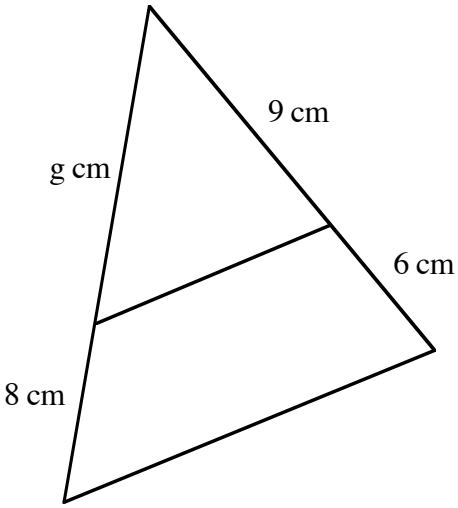


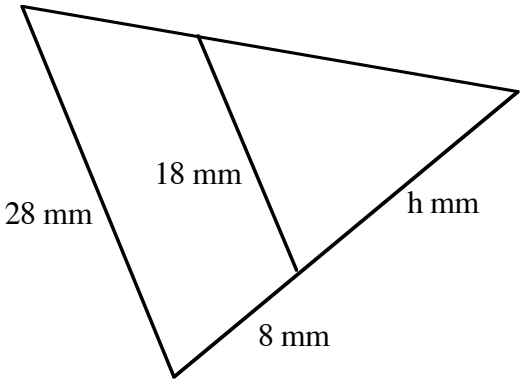


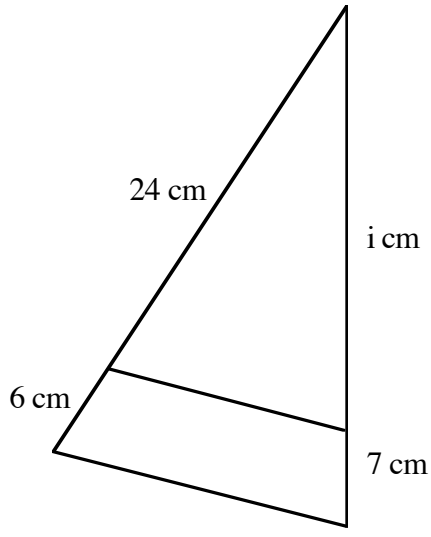




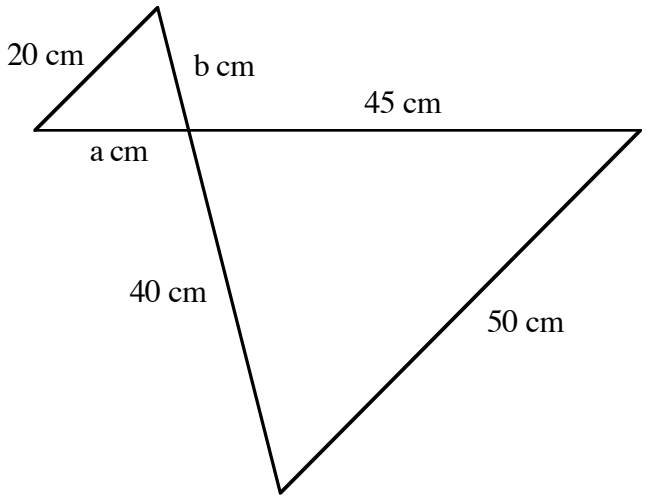


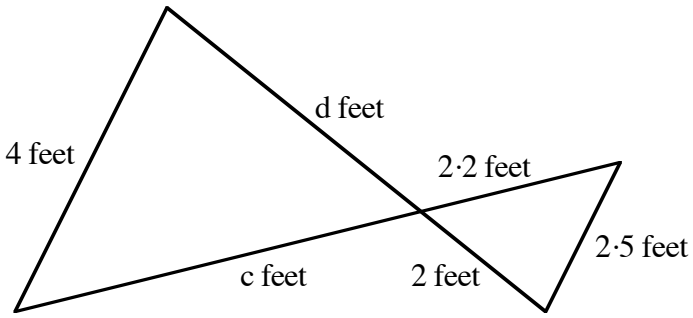


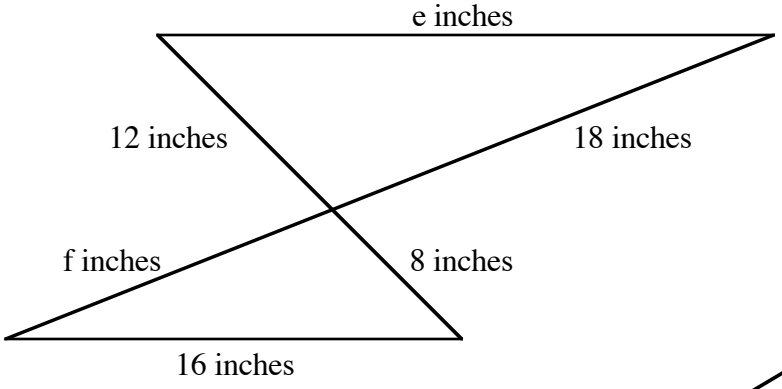


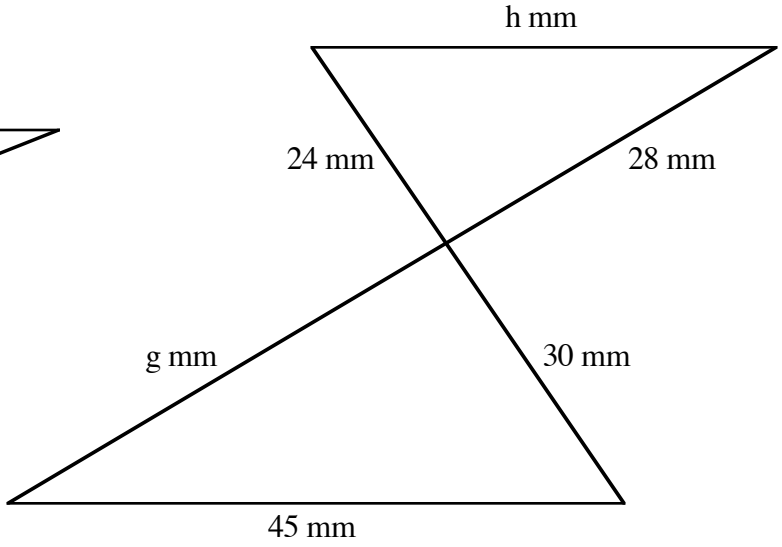


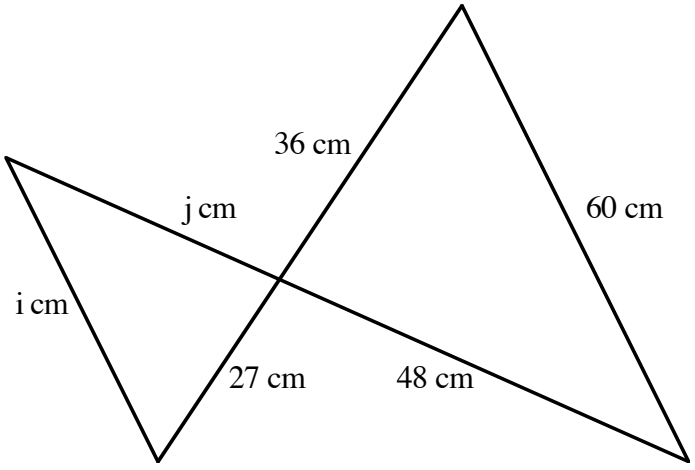
3. In each of the following diagrams find the lengths of the unknown sides.

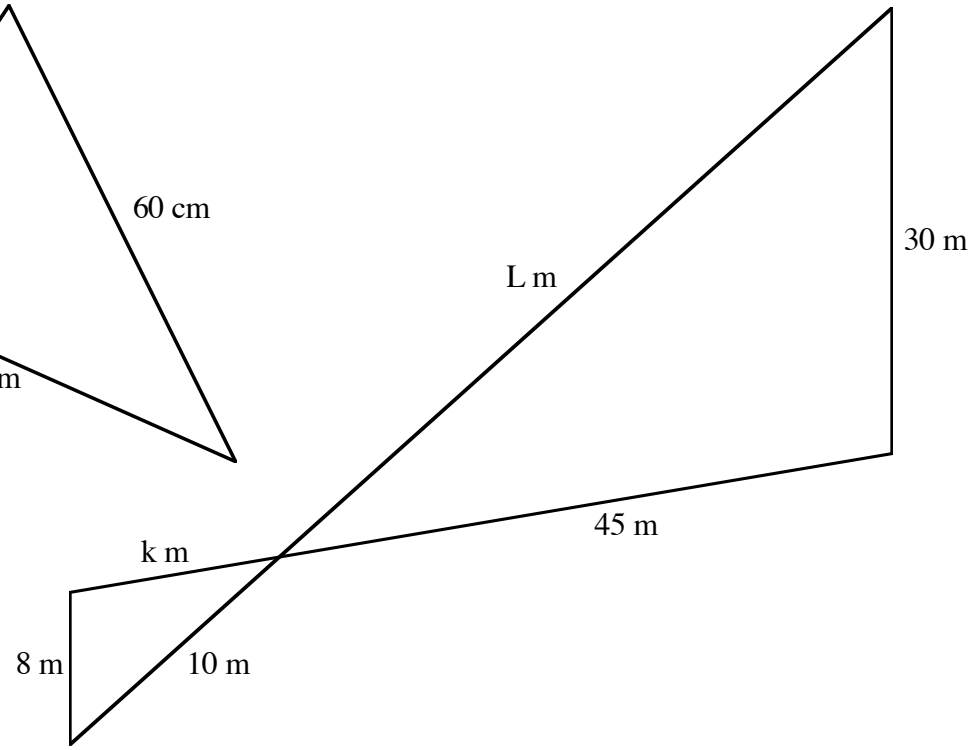




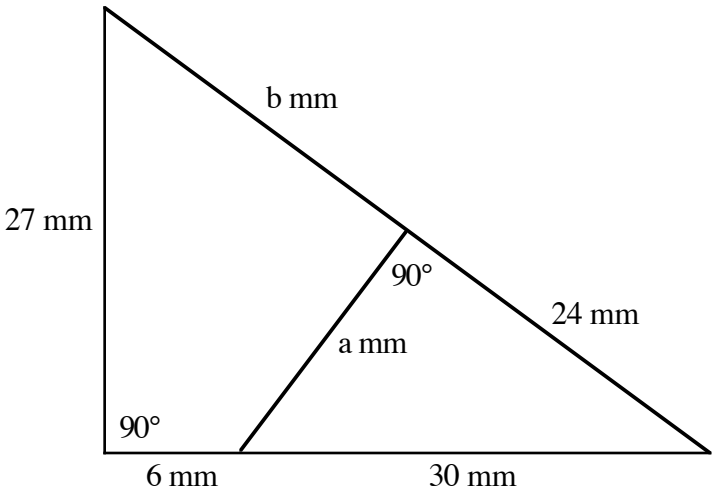


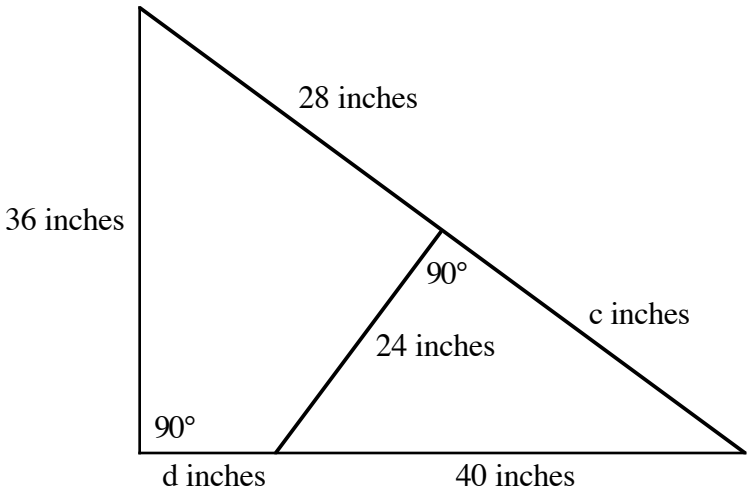


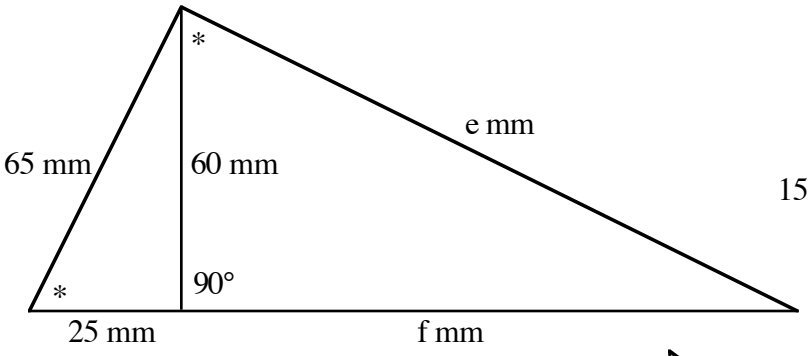


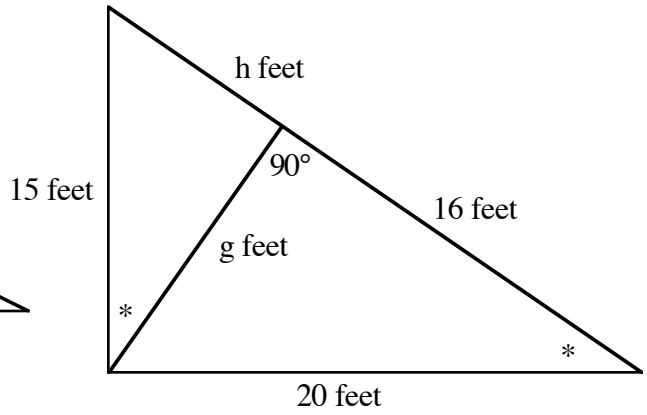


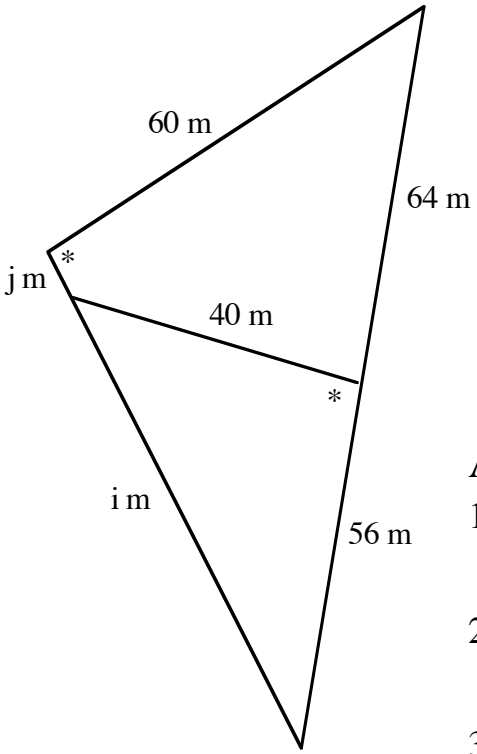
4. In the following diagrams find the sizes of the unknown lengths. Use **similarity** and **not** Pythagoras' Theorem. In some diagrams there are two marked angles which are equal.

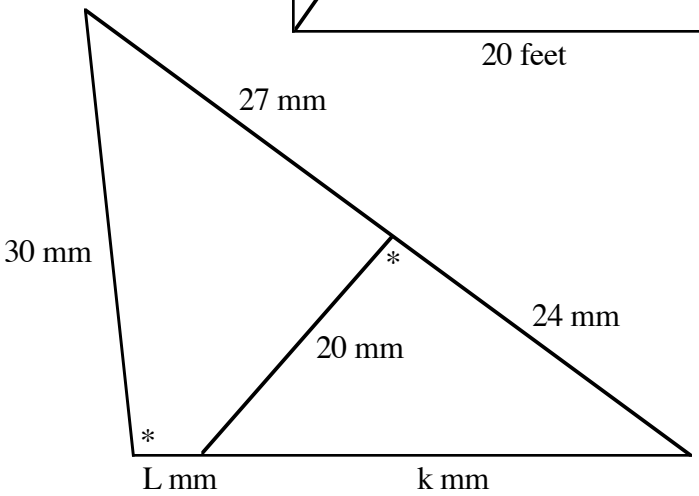












Answers

1. a = 16 b = 11·2 c = 1·6 d = 3·6 e = 2·4 f = 18
   g = 12 h = 12·8 i = 2·4
2. a = 2 b = 9·6 c = 12 d = 8 e = 18 f = 4·8
   g = 12 h = 14·4 i = 28
3. a = 18 b = 16 c = 3·52 d = 3·2 e = 24 f = 12
   g = 35 h = 36 i = 45 j = 36 k = 12 l = 37·5
4. a = 18 b = 21 c = 32 d = 8 e = 156 f = 144
   g = 12 h = 9 i = 80 j = 4 k = 34 l = 2