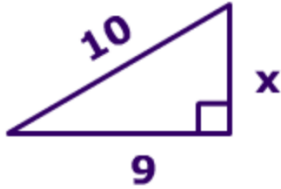
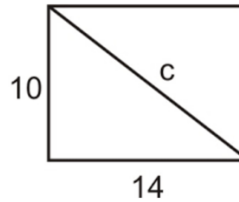


Do all questions without a calculator, and simplify all answers when possible.

1) Solve for x .



2) Solve for c in the rectangle below.

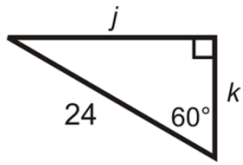


3) How many liters of 20% alcohol solution should be added to 40 liters of a 50% alcohol solution to make a 30% solution?

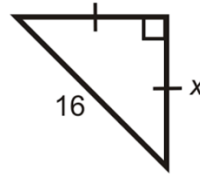
4) 2 kg of coconut juice which costs \$5/kg were combined with 8 kg of coconut milk which costs \$3/kg. Find the cost per kg of the mixture.

5) Coffee worth \$1.05 per pound is mixed with coffee worth 85¢ per pound to obtain 20 pounds of a mixture worth 90¢ per pound. How many pounds of each type are used?

6) Solve for j and k .



7) Solve for x .



8) For the equation $y = x^2 - 6x - 16$, identify the following:

Vertex (x, y) :

Axis of symmetry:

x -intercepts:

y -intercept:

9) Graph the equation $y = -2x^2 - 5x + 4$, and identify the following:

Vertex (x,y) :

Axis of symmetry:

x -intercepts:

y -intercept:

