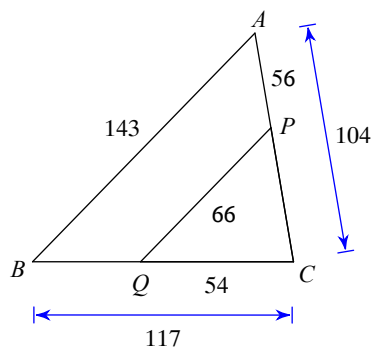
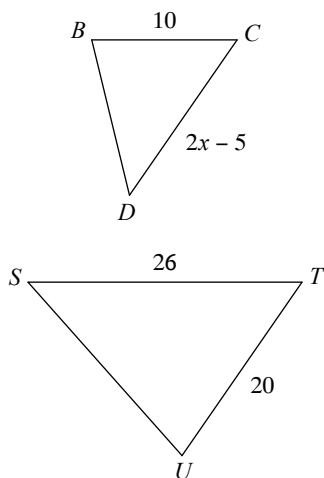


Unit 3 - Triangles and Trigonometry /9K /6T /4C /6A

Similar Triangles: Complete the similarity statement. __1C

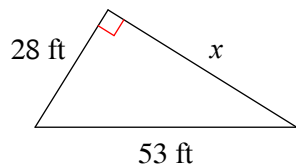
1)

 $\triangle CBA \sim$ _____**Solve for x . __2T**2) $\triangle UTS \sim \triangle BCD$ **Draw the diagram, then solve. __1C __2A**

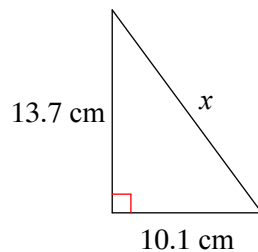
- 3) On a sunny day, a building casts a shadow of 10m. At the same time, you (being 1.5m tall) cast a shadow of 4m. How tall is the building?

Using Pythagorean Theorem, find the missing side of each triangle. Round your answers to the nearest tenth if necessary. ___4K

4)



5)



Draw and label the situation, then solve. ___1C ___2A

- 6) From one corner of a rectangle to the opposite is 112cm. The width is 34cm. What is the length of the rectangle?

Trigonometry

- 7) State the three trigonometric ratios. ___3K

Find the value of each trigonometric ratio to the nearest ten-thousandth. ___2K

8) $\sin 62^\circ$

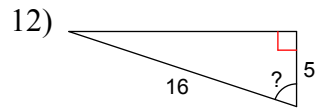
9) $\cos 71^\circ$

Find each angle measure to the nearest degree. ____2K

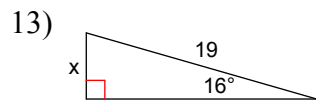
10) $\tan X = 0.7265$

11) $\cos U = 0.9903$

Find the measure of the indicated angle to the nearest degree. ____2T



Find the missing side. Round to the nearest tenth. ____2T



Draw and label the situation, then solve. ____1C ____2A

- 14) A ladder is leaned up against a wall. The bottom of the ladder is 3 feet from the wall and the angle between the ladder and ground is 62° . How long is the ladder?