

Warm-up

1) $A = 110^\circ$, $b = 32$ and $c = 38$. Find a .

$$a^2 = 32^2 + 38^2 - 2(32)38\cos 110 \quad 57.4$$

$$a = \sqrt{\text{Ans}} \quad \curvearrowright$$

2) $a = 15$, $b = 18$ and $c = 22$. Find B .

$$18^2 = 15^2 + 22^2 - 2(15)22\cos B \quad 54^\circ$$

3) $A = 65^\circ$, $B = 47^\circ$ and $b = 14$. Find a .

$$\cos^{-1} \left(\frac{18^2 - 15^2 - 22^2}{-2(15)22} \right) \quad \left| \quad \frac{a}{\sin 65} = \frac{14}{\sin 47} \quad 17.3$$

Warm-up

Greg has 8 coins in his pocket; 5 dimes, 2 quarters and a nickel.

1) How many ways could he arrange the coins in a row?

$$\frac{8!}{5!2!}$$

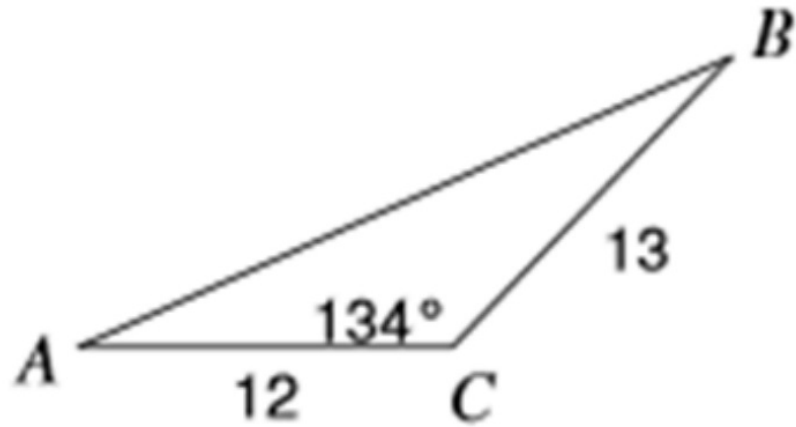
$$\boxed{168}$$

2) What is the probability that he picks a dime, then a quarter, then a dime (without replacing)?

$$\frac{5}{8} \cdot \frac{2}{7} \cdot \frac{4}{6}$$

$$\left(\frac{5}{42} \right)$$

1)

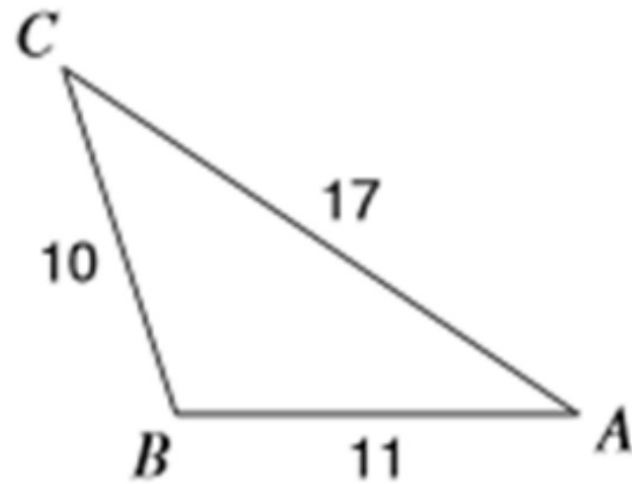


$$A = \underline{24^\circ} \quad a = \underline{13}$$

$$B = \underline{22^\circ} \quad b = \underline{12}$$

$$C = \underline{134^\circ} \quad c = \underline{23.0}$$

2)

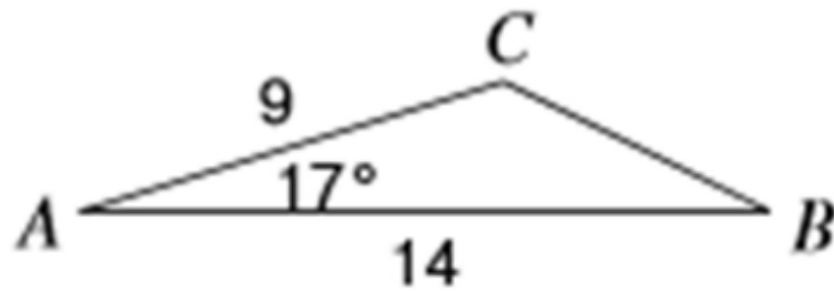


$$A = \underline{34^\circ} \quad a = \underline{10}$$

$$B = \underline{108^\circ} \quad b = \underline{17}$$

$$C = \underline{38^\circ} \quad c = \underline{11}$$

3)

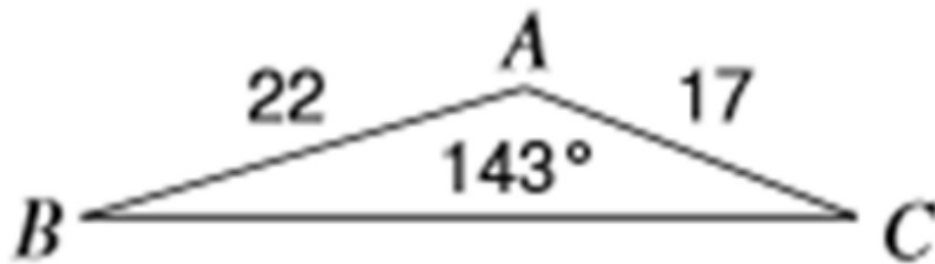


$$A = \underline{17^\circ} \quad a = \underline{6.0}$$

$$B = \underline{26^\circ} \quad b = \underline{9}$$

$$C = \underline{137^\circ} \quad c = \underline{14}$$

4)

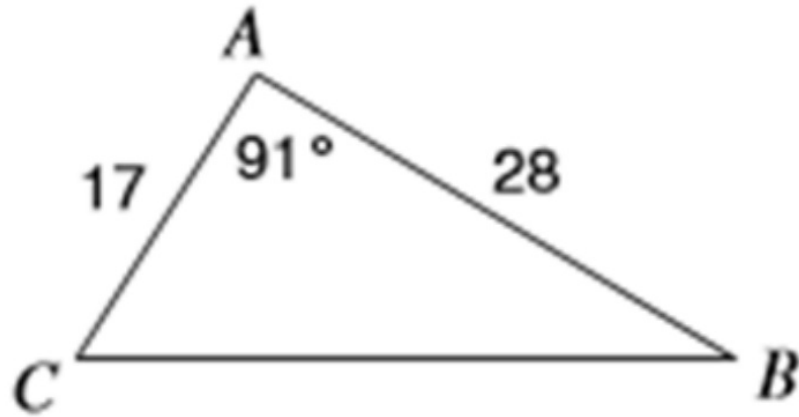


$$A = \underline{143^\circ} \quad a = \underline{37.0}$$

$$B = \underline{16^\circ} \quad b = \underline{17}$$

$$C = \underline{21^\circ} \quad c = \underline{22}$$

5)

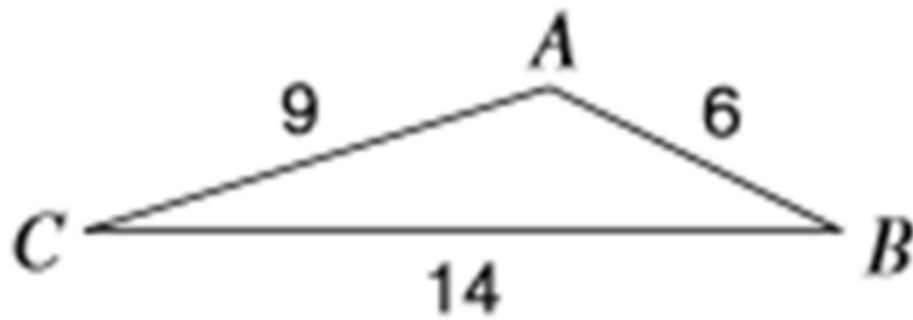


$$A = \underline{91^\circ} \quad a = \underline{33.0}$$

$$B = \underline{31^\circ} \quad b = \underline{17}$$

$$C = \underline{58^\circ} \quad c = \underline{28}$$

6)



$$A = \underline{137^\circ} \quad a = \underline{14}$$

$$B = \underline{26^\circ} \quad b = \underline{9}$$

$$C = \underline{17^\circ} \quad c = \underline{6}$$

U3: Trig. Part I

Mixed Laws

Law of Sine

Law of Cosine

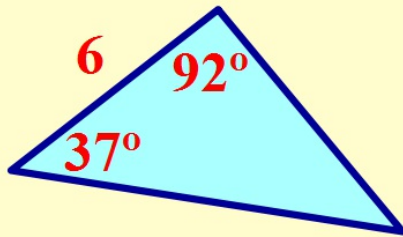
**There are 4 types of questions
that we have covered.**

**And these cover 2/3 of Unit 3's
topics.**

(and tomorrow's quiz)

1) 2 Angles

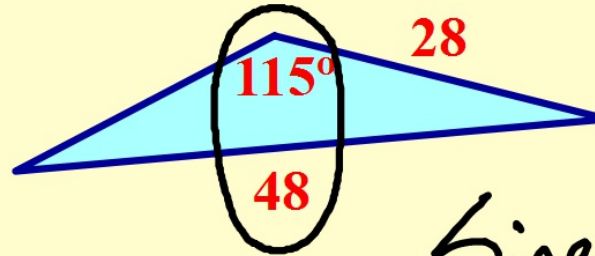
A, B and c



Sine

2) 1 Angle w/ Match

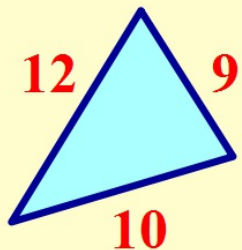
A, a and b



Sine

3) 3 Sides

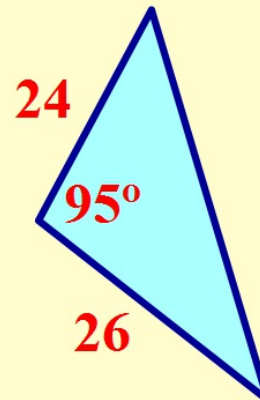
a, b and c



Cosine

4) 1 Angle w/o Match

A, b and c



Cosine

WB 303

#1-16s

All for E.C.