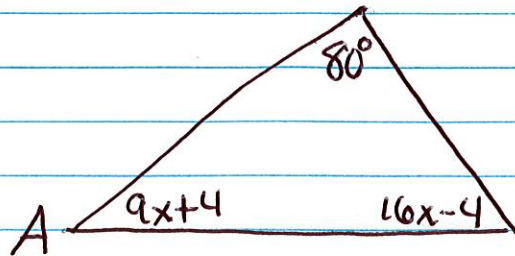


Angles Guided Review

1. Find the measure of angle A



This follows triangle sum theorem which says the ① of all the angles equals ②°.

therefore, 80 ③ $9x+4$ ④ $16x-4 =$ ⑤°

Next, combine your like terms: variable first

$$\underline{\textcircled{6}} + \underline{\textcircled{7}} = \underline{\textcircled{8}}^\circ$$

Now, add or subtract the constant.

$$\underline{\textcircled{9}} = \underline{\textcircled{10}}$$

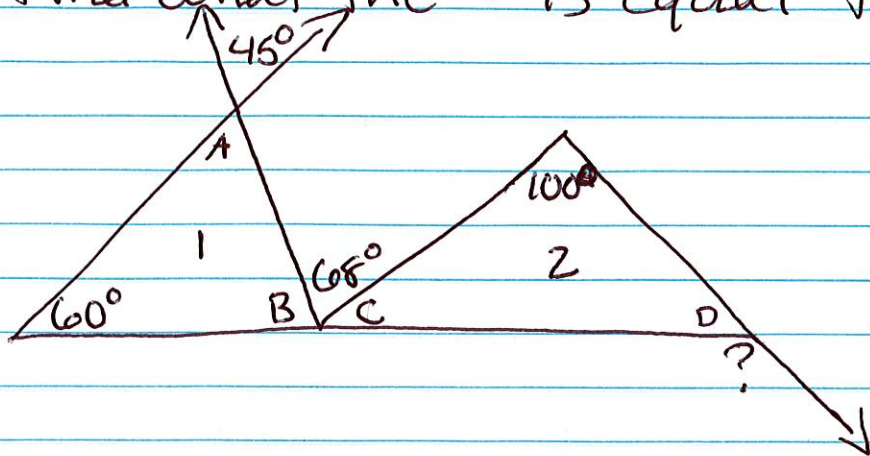
Last, divide both sides by the coefficient to find x.

$$x = \underline{\textcircled{11}}$$

Plug in x into ⑫ to find A.

$$\text{angle A} = \underline{\textcircled{13}}$$

2. Find what the ? is equal to.



First, find A. A and 45° are called
 ① angles. So, that means A
 is ② 45° also.

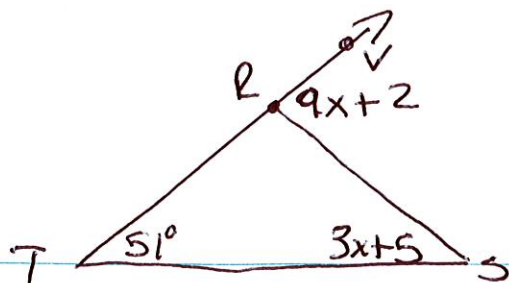
Now, triangle 1 has 2 of the 3 angles.
 To find B, you must ③ the
 other two angles from ④ 180° .

B, 68° , and C makes a ⑤
 angle which equals 180° . To
 find C you have to ⑥ B
 and 68° from ⑦ 180° .

Now you know what C is, you can
 use it to find D. Triangle 2 has
 2 of the 3 angles, to find D ⑧
 100° and C from ⑨ 180° .

Now that you know D, you should see
 that ? and D makes a straight
 angle. ⑩ D from ⑪ 180° to
 find that ? = ⑫ 32° .

3. Find x .



This follows the exterior angle theorem that says the exterior angle ^① is ② to the sum of the 2 ③ angles.

Therefore, 51 ^③ $3x+5 = 9x+2$

Next combine like terms: variable first on both sides
④ + ⑤ = ⑥

Move the constant on the left side of the equal sign to the right side by adding or subtracting

⑦ = ⑧

Move the variable on the right side of the equal sign to the left side by adding or subtracting

⑨ = ⑩

Last, divide both sides by the coefficient to find x .

$x =$ ⑪