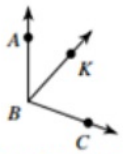
10.6.15

Statements	Justifications	Statements	Justifications
1. $9r + 11 = 29$ $9r + 11 = 29$ $-11 \quad -11$ $\frac{9r}{9} = \frac{18}{9}$ $r = 2$	CLT Subtraction p.o.e Division p.o.e	2. $m\angle ABC = 17x + 8$, $m\angle ABK = 42°$, and $m\angle KBC = 12x - 4$. Find $m\angle ABC$.  $17(6)+8 = 110$ $ABK + KBC = ABC$ $42 + 12x - 4 = 17x + 8$ $-8 \quad -8$ $12x + 30 = 17x$ $-12x \quad -12x$ $\frac{30}{5} = \frac{5x}{5}$ $x = 6$	AAP Substitution Combine like terms Subtraction poe Division poe

Write an equation to model the situation. Then solve using your justifications.

3. The tallest player on the basketball team is $77\frac{3}{4}$ in. tall. This is $9\frac{1}{2}$ in. taller than the shortest player. How tall is the shortest player?

Given — Unknown — Equation — Solve

Given: Tallest player is $77\frac{3}{4}$ $9\frac{1}{2}$ taller than the shortest player

Unknown: How tall is the shortest player.

Equation: $77\frac{3}{4} = n + 9\frac{1}{2}$
 $77.75 = n + 9.5$

Solve: $77\frac{3}{4} = n + 9\frac{1}{2}$
 $n = 68.25$

Sentence: The shortest player is 68.25

68.25 in