Answer on question #55316, Math / Algebra

Question Pete has some beads. Some are black and some are white. The ratio of black to white is 2:3. He has less than 10 black beads. What is the maximum number of white beads he could have?

Solution This number must be a multiple of 2, so 2:3 ratio holds. Biggest multiple of 2 less than 10 is 8. Hence, he has 8 black beads. The number of white beads is

$$\frac{8 \cdot 3}{2} = 12$$

Answer is 12.