

Student Work Sample D

WORK:

$$W = 20\% = \frac{1}{5}$$

$$B = 25\% = \frac{1}{4}$$

$$M = 12.5\% = \frac{1}{8}$$

$$G = 42.5\% = \frac{68}{160}$$

68 GIRLS

$$\frac{68}{x} = \frac{42.5}{100}$$



160

+80

$$x = 160 \text{ passengers}$$

$$160 \div 2 = 80$$

$$160 + 80 = 240$$

240 seats on the plane.

We got the percents of the women (20%), Boys (25%), Men (12.5%) & for the girls (42.5%). We added $20 + 25 + 12.5$ and got 57.5. Next, we subtracted 57.5 from 100 and we got 42.5%. We were finding the percent for 100, so we had to find the (hunk missing). Next, we set up our proportion. We were trying to find how many passengers were riding the plane, so we knew 68 girls were already riding. $\frac{68}{x} = \frac{42.5}{100}$ we got 160 passengers.
 $x = 160$

Now we knew 2/3 of the plane had 160 people. We needed to split the plane into thirds. Two of them we scratched out because there already was 160. So we had to divide 160 by two, & we got 80. Finally we added $160 + 80 = 240$. There was 240 seats on the plane.