

Name \_\_\_\_\_

## Airplane Cargo Mission (Real-World Applications) Answer Key

1.  $x + 4,200 = 18,000 \rightarrow x = 13,800 \text{ L}$

2.  $3x = 21,000 \rightarrow x = 7,000 \text{ kg}$

3.  $x + 8,750 = 14,000 \rightarrow x = 5,250 \text{ kg}$

4.  $4,500 + 1,200 = 5,700 \text{ L}$

5.  $3x = 3,900 \rightarrow x = 1,300 \text{ km per leg}$

6.  $2.5 \times 1.8 \times x = 9 \rightarrow 4.5x = 9 \rightarrow x = 2 \text{ m high}$

7.  $2,400x = 12,000 \rightarrow x = 5 \text{ hours}$

8.  $5x = 3,750 \rightarrow x = 750 \text{ kg per box}$

9.  $22,000 - 18,500 = 3,500 \text{ L remain}$

10.  $4,800 + 3,200 + x = 10,500 \rightarrow x = 2,500 \text{ kg}$

11.  $x + (x + 1,200) = 7,200 \rightarrow 2x + 1,200 = 7,200 \rightarrow 2x = 6,000 \rightarrow x = 3,000 \text{ km}$

(Plane D), 4,200 km (Plane C)

12.  $(8x) + 3,500 = 31,500 \rightarrow 8x = 28,000 \rightarrow x = 3,500 \text{ kg per plane}$