Name:_____   Date:_____

1. Indicate whether if the following pair of fractions are equivalent

a) $\dfrac{4}{12}$ and $\dfrac{12}{36}$	b) $\dfrac{5}{18}$ and $\dfrac{10}{36}$	b) $\dfrac{6}{18}$ and $\dfrac{10}{33}$	b) $\dfrac{8}{20}$ and $\dfrac{16}{32}$
b) $5:3$ and $11:6$	b) $7:49$ and $8:64$	b) $15:200$ and $45:600$	b) $1:13$ and $17:221$

2. Given that the pair of fractions or ratios are equivalent, find the missing value "k"

a) $\dfrac{11}{12} = \dfrac{k}{36}$	b) $\dfrac{4}{12} = \dfrac{k}{18}$	c) $\dfrac{3}{7} = \dfrac{21}{k}$
d) $\dfrac{9}{20} = \dfrac{k}{30}$	e) $\dfrac{8}{6} = \dfrac{k}{27}$	f) $\dfrac{42}{6} = \dfrac{k}{1}$
g) $10:11 = k:77$	h) $k:56 = 5:7$	i) $14:k = 70:55$

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j) $12:k=2:13$	k) $15:7=k:8$	l) $\dfrac{11}{15}=\dfrac{k}{17}$

3. A scientist captured 350 fish, marked them, and then returned the fish into the lake. Few days later, he captured 50 fish and 8 of them were marked. What is the estimated fish population in the lake?

4. The scale on a map is 1:750,000. If the distance on the map between two locations is 18cm, then how long will the distance be in the real life? Give your answer in km

5. The ratios of the length to the width of a rectangular field is 4:3. If the perimeter of the field is 157.5meters, then what are the dimensions of the rectangular field?

6. Challenge: In bag A, the ratio of blue marbles to red marbles is 4:3 and in bag B, the ratio of blue to red is 3:1. If 6 red marbles are moved from bag A to bag B, the ratios are changed. In bag A, the ratios are now 2:1 and in bag B 2:1. How many red marbles and blue marbles are there altogether?