Mixed practice problems for test April 24

1. Starting from the ratio information, the ratio of hardback to paperback books on my bookshelf is 3:5, express this same relationship in several ways, by filling each blank with a number:

a. There are \_\_\_\_ as many hardback as paperback books on my shelf

b. \_\_\_\_ of the books on my shelf are hardback books.

c. \_\_\_\_ % of the books on my shelf are hardback books.

2. There are 2/3 as many male teachers as female teachers in a school. If there are 30 teachers altogether, how many more female teachers than male teachers are there?

3. At the pet store the ratio of mongrels to pure-breds is two to seven. Two more pure-bred dogs and two more mongrels are brought in. If there are 8 mongrels after the new dogs arrive, how many dogs are there now?

4. Use dimensional analysis to solve: Bob reads 20 pages in 15 minutes. How long does it take him to read 35 pages?

5. For this triangle, draw in the height, using the bold side as the base, and draw in a parallelogram with twice the area that shares the bold side as a base:

 

6. Find the area of:

 and 

7. Find the perimeter of:

 and 