

6.1 If a window display of live kittens at a pet shop contains 8 Domestic Shorthair, 11 Siamese, 4 Persian, and 7 Angora kittens, what are the probabilities that 1 kitten selected at random will be:

- Persian
- Domestic Shorthair or Angora
- If two kittens are chosen at random, what is the probability that both are Persian

Domestic Shorthair	Siamese	Persian	Angora
$\frac{8}{30}$	$\frac{11}{30}$	$\frac{4}{30}$	$\frac{7}{30}$

$$(a) \quad P(\text{Persian}) = \frac{4}{30} \approx \boxed{0.133}$$

$$(b) \quad P(\text{Domestic Shorthair or Angora}) = \frac{8}{30} + \frac{7}{30} = \frac{15}{30} = \boxed{0.5}$$

$$(c) \quad P(\text{Persian and Persian}) = \frac{4}{30} \cdot \frac{3}{29} = \frac{4}{290} \approx \boxed{0.014}$$

STUDY: Chapter 3: Section 3.3 & 3.4  
• Addition Rule & Multiplication Rule