

1.
 - a. $(1/4)^3$
 - b. $(1/4)^3$
 - c. $(1/2)^3$
 - d. $(1/4)^2(1/2)$
2.
 - a. $(3/4)^3$
 - b. $1 - (3/4)^3$
 - c. $(1/4)^3$
 - d. $1 - (1/4)^3$
3.
 - a. $(1/2)^4$
 - b. $(1/2)^2(1/4)^2$
4. 12 colourless: 3 purple: 1 red
5. Monohybrid cross gives 2 platinum to 1 silver offspring.
a) recessive for lethality, b) dominant for platinum coat
6.

gray $3/4 (A_)$ x $3/4 (B_)$ x $1/2 (Cc)$ = 9/32
 yellow $3/4 (A_)$ x $1/4 (bb)$ x $1/2 (Cc)$ = 3/32
 black $1/4 (aa)$ x $3/4 (Bb)$ x $1/2 (Cc)$ = 3/32
 cream $1/4 (aa)$ x $1/4 (bb)$ x $1/2 (Cc)$ = 1/32

all remainder (16/32) will be albino (_____cc)
7. Parents must be $I^A i, Cc$ x $I^A i, CY$

Therefore, ii, $C_$ would be $1/4$ x $1/2$
8. The question is a mess. My apologies for not checking it more closely before it went out. You need to realize that vermillion and brown are recessive and that homozygotes for both are white.
 - a) $v v b^+ b^+ \times v^+ Y b b$ would give $v v^+ b^+ b$ (wild type) daughters and $v Y b^+ b$ (vermillion) sons
 - b) $v v b b \times v^+ Y b^+ b^+$ would also give $v v^+ b^+ b$ (wild type) daughters and $v Y b^+ b$ (vermillion) sons