

$$c) P(\text{not winning}) = 1 - P(\text{win})$$

$$1 - \frac{1}{3} = \frac{2}{3}$$

5-27)

a) no because both probabilities are greater than $\frac{1}{2}$, total prob. can't be more than 1.

$$b) \frac{2}{5} + \frac{1}{3} + \frac{4}{15} = 1$$

RR KK PP

no because there are no pieces of Crazy Coconut since it = 1.

$$c) \frac{7}{30} \text{ because } 1 - \frac{3}{10} = \frac{7}{10} \quad \frac{7}{10} \div 3 = \frac{7}{30}$$

5-28) Learning Log see Toolkit

5.2.1

HWK

5-29)

$$a) P(\text{Diamond}) = \frac{13}{52} = 25\%$$

$$b) P(\text{rolling an \# < 5}) = \frac{4}{6} \text{ OR } 66.67\%$$

$$c) P(\text{blue}) = \frac{3}{18} = 16.67\%$$

5-30) Remove Aces + twos!

$$a) P(\text{Heart}) = \frac{11}{44}$$

$$b) P(\text{black}) = \frac{22}{44}$$

$$c) P(\text{face card}) = \frac{12}{44}$$

d) $P(\text{face card})$ with a normal deck is $\frac{12}{52}$.
It is more likely to draw a heart in the modified deck because there are fewer non-face cards.

e) $P(\text{not heart}) = \frac{33}{44}$

5-31) mean = 3.75 miles
median = 3.5 miles

5-32) a) $A = bh$
 $= 27.17$
 $= 459 \text{ m}^2$

b) $A = \frac{1}{2}bh$
 $= \frac{1}{2}(20.75 \cdot 9)$
 $= 93.38 \text{ m}^2$

5-33)

a) $3(8-4) + 4^2 - (2+3)$
 $3(4) + 4^2 - (2+3)$
 $3(4) + 16 - (2+3)$
 $3(4) + 16 - 5$
 $12 + 16 - 5$
 $28 - 5$
 23

b) $7.4 - 3.8 + 2^2 - 6$
 $7.4 - 3.8 + 4 - 6$
 $28 - 24 + 4 - 6$
 $4 + 4 - 6$
 $8 - 6$
 2

c) $7 - (-3) + (-4 + 3)$
 $7 - (-3) + (-1)$
 $10 + (-1)$
 9

d) $-6 - 4(3 \cdot 2) + 5^2$
 $-6 - 4(6) + 25$
 $-6 - 24 + 25$
 $-30 + 25$
 -5