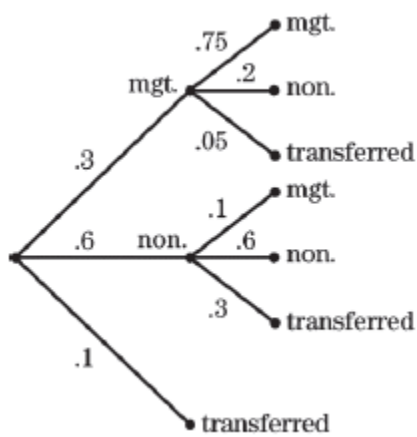


MATH 1500

Section 6.5 HW Solutions: 3, 5, 7, 12, 14

3.



5. $0.30 \times 0.75 + 0.60 \times 0.10 = 0.285$

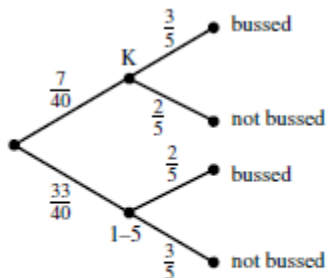
7. $0.10 + 0.30 \times 0.05 + 0.60 \times 0.30 = 0.295$

12. a. $\Pr(\text{white}) = \frac{6}{8} = \frac{3}{4} = 0.75$

b. $\Pr(\text{red and white}) = \frac{2}{8} \cdot \frac{6}{7} = \frac{3}{14}$

c. $\Pr(\text{red and red and white}) = \frac{2}{8} \cdot \frac{1}{7} \cdot \frac{6}{6}$
 $= \frac{1}{28}$

14.



$\Pr(\text{elev. lead levels}) =$
 $0.77 \cdot 0.06 + 0.23 \cdot 0.11 = 0.0715$