

Answers to correlation and regression practice problems

1. R-adjusted = .427. A significant correlation between anxiety and depression was observed,  $r(40) = +.45, p < .05$ .
2. a.  $\text{depression}' = 21 + .6X$   
b.  $s_y' = 3.6$ . This number tells you that, on average, actual scores for depression are different from predicted scores for depression by 3.6 points  
c.  $X = 8.3 \rightarrow y' = 25.98; X = 16.1 \rightarrow y' = 30.66; X = 20.4 \rightarrow y' = 33.24$
3. The correlation between job satisfaction and systolic blood pressure is significantly different from zero,  $r(8) = -.848, p < .05$ . R-adjusted = .827.
4.  $Y' = 136.3 + 39.2X; X = 15 \rightarrow y' = 158.7$ ;
5. a. A significant correlation between stress at work and overall health was observed,  $r(100) = +.41, p < .05$ .  
b. R-adjusted = .40  
c. (no c. listed)  
d.  $Y' = 2.155 + .15X$   
e.  $Zy' = +.41(Zx)$   
f.  $Sy' = 1.19$   
g.  $X = 9.1 \rightarrow y' = 3.52; X = 14 \rightarrow y' = 4.255; X = 17.3 \rightarrow y' = 4.75$
6. SPSS problem – not on Exam 2