Practice worksheet | Statistics and regression

Interpreting slope/intercept

Name: _____ Date: _____

6 questions | 18 marks

1. A fitted crop yield is Y=2+0.4R, with Y in tonnes and R in mm rainfall. Interpret 0.4. [3 marks]

2. A model T=90-2.5x predicts test time in minutes from weeks of training. Interpret -2.5. [3 marks]

3. A tree model h=1.2+0.7t was fitted only for ages 5-12 years. Is 1.2 m a reliable measured height at birth? [3 marks]

4. Change $y=4+12x$ from x hours to t minutes. [3 marks]

5. The model $y=5+0.03x$ uses x in dollars. Express it with z in hundreds of dollars. [3 marks]

6. A regression gives an intercept of -8 for mass predicted from length. Must the entire model be useless? [3 marks]