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]