1. Find the mean of 3, 7, 8, 10, 12.

   _____

2. Which value of r shows the strongest linear relationship?

   ☐ 0.10

   ☐ -0.92

   ☐ 0.85

   ☐ -0.40

3. Classes 0–10 (frequency 4), 10–20 (6). Estimate the mean.

   _____

4. For $y = 12 + 0.6x$ (y = mass in kg, x = age in months), what does 0.6 mean?

   ☐ 60% of babies gain weight

   ☐ The mass at birth is 0.6 kg

   ☐ The correlation is 0.6

   ☐ The mass increases by about 0.6 kg per month

5. For 8 values, $\sum x = 40$ and $\sum x^2 = 232$. Find the standard deviation.

   _____

6. With $t = 8 + 2d$, predict the time for a 6.5 km delivery.

   _____ minutes

7. A class 40–60 has frequency 30. Find its frequency density.

   _____

8. Data were collected for $2 \le d \le 9$. A prediction at $d = 7$ is extrapolation.

   ☐ True ☐ False

9. In a histogram with unequal classes, the tallest bar always holds the most values.

   ☐ True ☐ False

10. Countries with more TVs per person have higher life expectancy. What can you conclude?

    ☐ Long life causes people to buy TVs

    ☐ TVs make people live longer

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☐ There is a correlation, possibly through a third factor such as wealth

1. **8**

   $40 \div 5$.

2. -0.92

   Closest to ± 1.

3. **11**

   $\frac{5\times 4+15\times 6}{10}$.

4. **The mass increases by about 0.6 kg per month**

   Gradient = change in y per unit x.

5. **2**

   $\bar{x} = 5$; $\sqrt{\frac{232}{8} - 5^2} = \sqrt{4}$.

6. **21 minutes**

   $8 + 13$.

7. **1.5**

   $30 \div 20$.

8. **False**

   7 is inside the range: interpolation.

9. **False**

   Area gives frequency.

10. **There is a correlation, possibly through a third factor such as wealth**

    Correlation is not causation.

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