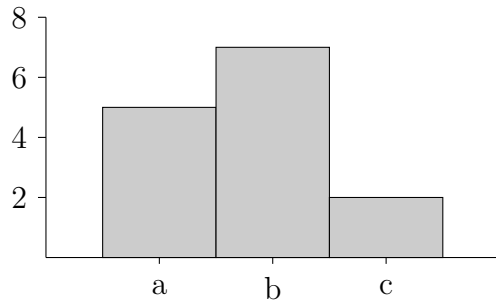


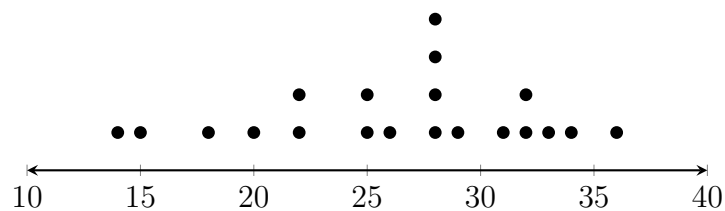
Instructions: This is just a test of the emergency exam broadcast system. If it were a real exam, this note would be followed by instructions on how to complete

Is this the real life? Is this just fantasy?

1. Here is a histogram:



2. This is a dot plot:



3. Find the class width of the set: 14, 21, 29, 33, 35, 59, 78, 98

4. (2 pts) Solve the inequality $\frac{9.0}{x-4} \geq \frac{1.0}{x+3}$:

$$9.0x - 36.0 \geq 1.0x + 3.0 \quad [-3.875, -3) \cup (4, \infty)$$

5. (2 pts) Solve the inequality $\frac{3.0}{x+2} \geq \frac{7.0}{x+3}$:

$$3.0x + 6.0 \geq 7.0x + 21.0 \quad (-\infty, -3) \cup (-2, -1.25]$$

6. (2 pts) Solve the polynomial equation: $x^2 + 6x + 9 = 0$.

$$\begin{aligned} x^2 + 6x + 9 &= (x+3)(x+3) \\ \Rightarrow x &\in \{-3\} \end{aligned}$$

7. (4 pts) Solve the polynomial equation: $5x^2 - 2x - 24 = 0$.

$$5x^2 - 2x = 24$$

$$x^2 - \frac{2x}{5} = \frac{24}{5}$$

$$x^2 - \frac{2x}{5} + \frac{1}{25} = \frac{121}{25}$$

$$\left(x - \frac{1}{5}\right)^2 = \frac{121}{25}$$

$$\left(x - \frac{1}{5}\right)^2 = \frac{121}{25}$$

$$x - \frac{1}{5} = \pm \frac{11}{5}$$

$$x \in \left\{-2, \frac{12}{5}\right\}$$