

Barbie & Proportions

Tuesday, February 16, 2010

1:38 PM

Barbie Foot: 2.5 cm

Real foot: 23.5 cm

Scale Factor $\frac{\text{Pre-image}}{\text{Image}} = \frac{2.5}{23.5} \approx$

Barbie Height: 27.2 cm

"Real" Height

$$\frac{2.5 \text{ cm}}{23.5 \text{ cm}} = \frac{27.2 \text{ cm}}{x}$$

Barbie
Person
foot height

$$(2.5 \text{ cm})(x) = (27.2 \text{ cm})(23.5 \text{ cm})$$
$$x = \frac{(27.2 \text{ cm})(23.5 \text{ cm})}{2.5 \text{ cm}}$$