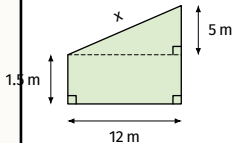


Supplier Decision



Use the shared diagram throughout. Show each measurement, apply the stated rates, and give a traceable final decision.

The profile is 12 m wide, with a 1.5 m platform, 5 m rise and 4 m depth.



(a) Find its cross-sectional area, slope length and volume.

(b) Finish costs are $\$120/\text{m}^2$ on the rectangle plus $\$650$, and $\$66/\text{m}^2$ on the triangle. Lights cover base plus slope at $\$75/\text{m}$.

(c) Supplier A charges $\$218/\text{m}^3$. Supplier B charges $\$205/\text{m}^3$ plus $\$3100$ delivery. Which gives the lower total project cost?

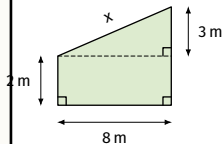
(d) State two assumptions that could materially affect the quote.

Budget Risk



Use the shared diagram throughout. Show each measurement, apply the stated rates, and give a traceable final decision.

The profile is 8 m wide with a 2 m platform, 3 m rise and 6 m depth. The project budget is \$45 000.



(a) Find area, slope, and volume.

(b) Finish the visible side: rectangle \$135/m² plus \$500; triangle \$72/m²; lights along base and slope \$82/m.

(c) Concrete is quoted at \$232/m³ with a 5% wastage allowance. Is the project within budget?

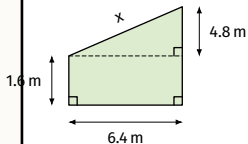
(d) Explain why using rounded intermediate values could change a borderline decision.

Camera-Side Limitation



Use the shared diagram throughout. Show each measurement, apply the stated rates, and give a traceable final decision.

The course has a 6.4 m base, 1.6 m platform, 4.8 m rise and 5 m depth. The quoted art and logos cover only the camera-facing side.



- (a)** Calculate the visible areas, slope and concrete volume.
- (b)** Logos cost $\$128/\text{m}^2$ plus $\$625$; art $\$69/\text{m}^2$; lighting along base and slope $\$76/\text{m}$; concrete $\$224/\text{m}^3$. Find the quote.
- (c)** The client later asks for both sides to receive logos and art, but lighting remains on one side. Find the revised total.
- (d)** Identify the original model limitation revealed by this change.