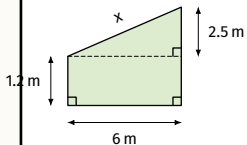


Skate Course Quote



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

The diagram is one visible side of a course, extruded to a constant depth of 5 m. The rectangle carries sponsorship; the triangle carries street art. Lights follow the 6 m ground run and the sloping edge.



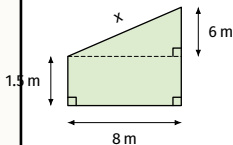
- (a)** Find the rectangular and triangular areas, then the total cross-sectional area.
- (b)** Sponsorship costs $\$125/\text{m}^2$ plus $\$650$ installation. Find its cost.
- (c)** Street art costs $\$62.50/\text{m}^2$. Find its cost.
- (d)** The sloping edge is 6.5 m. Lights cost $\$77.50/\text{m}$. Find the lighting cost.
- (e)** Concrete costs $\$220/\text{m}^3$. Find the volume, concrete cost, and total project cost.

Training Ramp Upgrade



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

One visible side has an 8 m base, a 1.5 m rectangular platform and a 6 m rise. The course depth is 4 m.



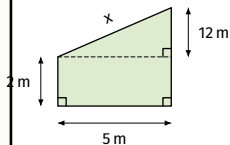
- (a)** Find the two component areas and total cross-sectional area.
- (b)** Branding covers the rectangle at $\$110/\text{m}^2$ plus $\$500$ setup; artwork covers the triangle at $\$70/\text{m}^2$.
- (c)** The sloping edge is 10 m. Lights follow it and the base at $\$65/\text{m}$.
- (d)** Concrete costs $\$205/\text{m}^3$. Find its volume and cost.
- (e)** Find the complete project cost.

Competition Launch Ramp



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

The profile has a 5 m base, 2 m platform height and 12 m rise. It is extruded 3.5 m.



- (a)** Find the cross-sectional area.
- (b)** Logos cost $\$140/\text{m}^2$ on the rectangle plus $\$600$ setup; art costs $\$55/\text{m}^2$ on the triangle.
- (c)** Use Pythagoras to find the slope, then price lights along the slope and base at $\$80/\text{m}$.
- (d)** Concrete is $\$230/\text{m}^3$. Find the volume and cost.
- (e)** Find the total.