

Integrated measurement projects

Coordinate area, length, volume, rates and decisions from one model.



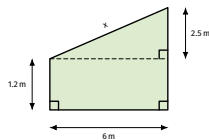
Name _____

Date _____

Project method

For each project, use the labelled cross-section throughout. Keep full precision until the final money answer; show units and justify decisions.

Project A



Depth 5 m. Rectangle finish $\$125/\text{m}^2 + \650 ; triangle art $\$62.50/\text{m}^2$; lights on base+slope $\$77.50/\text{m}$; concrete $\$220/\text{m}^3$.

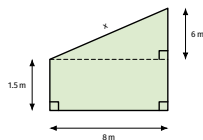
1. Find rectangle, triangle and total areas.

2. Find the slope and volume.

3. Find the complete quote.

Questions 1–3

Project B



Depth 4 m. Rectangle branding $\$110/\text{m}^2 + \500 ; triangle art $\$70/\text{m}^2$; lights $\$65/\text{m}$; concrete $\$205/\text{m}^3$.

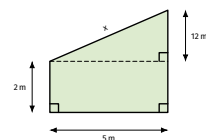
4. Find all areas.

5. Find slope and volume.

6. Find the complete quote.

Questions 4–6

Project C



Depth 3.5 m. Rectangle logos $\$140/\text{m}^2 + \600 ; triangle art $\$55/\text{m}^2$; lights $\$80/\text{m}$; concrete $\$230/\text{m}^3$.

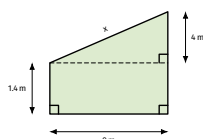
7. Find all areas.

8. Find slope and volume.

9. Find the complete quote.

Questions 7–9

Project D



Depth 4.5 m. Triangle art has 8% wastage at $\$68/\text{m}^2$; rectangle branding $\$118/\text{m}^2 + \720 ; lights $\$74/\text{m}$; concrete $\$215/\text{m}^3$.

10. Find all areas.

11. Find slope and volume.

12. Find the complete quote.

Questions 10–12

Integrated measurement projects

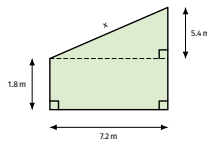
Compare options, respect purchase rules, and test assumptions.



Name _____

Date _____

Project E



Depth 3.8 m. Rectangle branding \$145/m², less 6%, + \$540; art \$64/m²; lights \$79/m; concrete \$225/m³.

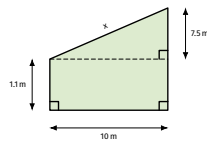
Questions 13–15

13. Find all areas.

14. Find slope and volume.

15. Find the complete quote.

Project F



Depth 5.2 m. Concrete: 6 m³ loads at \$1320. Finishes: rectangle \$130/m², triangle \$60/m², + \$800. Lights \$72/m.

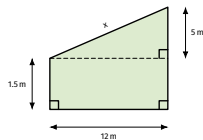
Questions 16–18

16. Find area, slope and volume.

17. Find loads and concrete cost.

18. Find total; explain the rounding.

Project G



Depth 4 m. Other costs: rectangle \$120/m² + \$650; triangle \$66/m²; lights \$75/m. Concrete A \$218/m³; B \$205/m³ + \$3100.

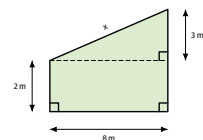
Questions 19–21

19. Find area, slope and volume.

20. Find both complete totals.

21. Recommend; state the difference.

Project H



Depth 6 m; budget \$45 000. Finishes: rectangle \$135/m² + \$500; triangle \$72/m²; lights \$82/m. Concrete \$232/m³ with 5% wastage.

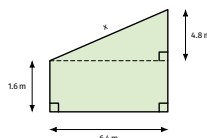
Questions 22–24

22. Find area, slope and volume.

23. Find the complete quote.

24. Decide against budget; explain precision.

Project I



Depth 5 m. Logos \$128/m² + one \$625 fee; art \$69/m²; lights \$76/m; concrete \$224/m³. Initial quote finishes one side.

Questions 25–27

25. Find areas, slope and volume.

26. Find the one-side quote.

27. Revise for two finished sides; name the limitation.