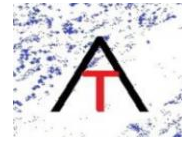




ALBA MATHEMATICS
Course Revision Task 9
Answers



| Quest. | App | E&F | Rel | Answer |
|--------|-----|-----|-----|--|
| 1a | | | ✓ | Lands after 5 seconds |
| 1b | | | ✓ | Max. height = 9 metres |
| 2 | | ✓ | | Volume = 3620cm^3 (3 s.f.) |
| 3 | | ✓ | | Using Pythagoras, $AB = \sqrt{44}$ then $AC = \sqrt{80} = 4\sqrt{5}$ |
| 4 | | ✓ | | $\frac{4p^2 + 3q}{2pq}$ |
| 5 | | ✓ | | $3x^2(x + 1)(x - 1)$ |
| 6 | | ✓ | | $x^3 + 2x^2 - 27x + 12$ |
| 7 | | | ✓ | $x = 3$ and $^{-5}/_2$ |
| 8 | | | ✓ | $g = \frac{4q+8}{15q}$ |
| 9 | | ✓ | | $3\frac{1}{2}$ |
| 10 | | ✓ | ✓ | Axis of symmetry: $x = 3$; Turning point (3,-1) |