PLOTTING QUADRATIC GRAPHS FROM A TABLE OF VALUES

Spiral Questions

S1. A book costs £30. Its price is reduced by 20%. What is the sale price?

S2. Find the area of a circle with diameter 14cm. Use π=3.14

S3. Solve $2x + 3y = 16$ and $x - y = 2$

S4. Solve $5x - 2y = 11$ and $3x + y = 10$

Main Questions

M1. $y = x^2$ when $x = -3$

M2. $y = x^2$ when $x = -1$

M3. $y = x^2$ when $x = 0$

M4. $y = x^2$ when $x = 2$

M5. $y = x^2$ when $x = 3$

M6. $y = 2x^2 - 5$ when $x = -2$

M7. $y = 2x^2 - 5$ when $x = -1$

M8. $y = 2x^2 - 5$ when $x = 1$

M9. $y = 2x^2 - 5$ when $x = 2$

M10. $y = -x^2 + 4$ when $x = 0$

Apply Questions

A1. The area of a square tile is x^2 cm^2. What is the area when $x=7$?

A2. A ball's height h metres at time t seconds is $h = 6t - t^2$. Find h when $t=1$

A3. The profit P pounds from selling n items is $P = -n^2 + 12n$. Find P when $n=5$

A4. A quadratic graph $y = x^2 - 7x + 12$ crosses the x-axis. What are the x-values?

A5. The maximum height for $h = 8t - 2t^2$ occurs at $t=2$. What is the maximum height?