PLOTTING LINEAR GRAPHS FROM A TABLE OF VALUES

Spiral Questions

S1. A shirt costs £40. Its price increases by 15%. What is the new price?

S2. A circle has radius 7cm. Calculate its area. Use π = 3.14.

S3. Solve the simultaneous equations: 2x + y = 10 and x - y = 2.

S4. Solve the simultaneous equations: 3x + 2y = 16 and 4x - y = 3.

Main Questions

M1. For y = x + 1, find the y-values for x=0,1,2,3.

M2. For y = 2x, find the y-values for x=0,1,2,3.

M3. For y = 3x - 1, find the y-values for x=0,1,2,3.

M4. For y = -x + 3, find the y-values for x=0,1,2,3.

M5. For y = 4x + 2, find the y-values for x=-1,0,1.

M6. For y = -2x + 1, find the y-values for x=-1,0,1.

M7. For y = (1/2)x - 3, find the y-values for x=0,2,4.

M8. For y = 3x + 4, find the y-values for x=-2,0,2.

M9. For y = -3x - 2, find the y-values for x=-2,-1,0.

M10. For y = 5x - 3, find the y-values for x=-1,0,1,2.

Apply Questions

A1. A plant is 10cm tall and grows 3cm each week. What is its height at the start and after 1, 2, 3, and 4 weeks?

A2. A tank contains 100 litres of water and leaks at 2 litres per hour. How much water remains after 0, 1, 2, and 3 hours?

A3. A car starts with 20 litres of petrol and uses 0.5 litres per kilometre. How much petrol remains after 0km, 10km, 20km, and 30km?

A4. A swimming pool starts with 1000 litres of water and is filled at 200 litres per minute. How much water is in the pool after 0, 5, 10, and 15 minutes?

A5. A candle is 20cm long and burns at a constant rate of 0.5cm per minute. How long is the candle after 0, 5, 10, and 15 minutes?