

## Direct and Inverse Proportion Topic Test 1 (10 minutes)

### Mark Scheme

| Q    | Answer   | Mark | Comments |
|------|--|------|----------|
| 1(a) | $y \propto x$ or $x \propto y$<br>or $y = k \times x$ or $x = k \times y$  | M1   |          |
|      | $18 = k \times 6$ or $k = 3$   | M1   |          |
|      | $y = 3x$ or $x = \frac{1}{3}y$   | A1   |          |
| 1(b) | $30 = 3x$<br>$(x =)10$   | A1   |          |
| 2    | $h \propto \frac{1}{y}$ or $h = \frac{k}{y}$ or $h = k \times \frac{1}{y}$ | M1   |          |
|      | $k = 14$   | A1   |          |
|      | $3\frac{1}{2}$   | A1   |          |
| 3(a) | $c \propto n$ or $n \propto c$<br>or $c = k \times n$ or $n = k \times c$  | M1   |          |
|      | $99 = k \times 18$ or $k = 5.5$  | M1   |          |
|      | $c = 5.5n$   | A1   |          |
| 3(b) | $70 = 5.5n$ or 12.7  | M1   |          |
|      | 12   | A1   |          |