



TEST YOUR SKILLS

- 1** Solve the inequality $3x - 7 < 2$, $x \in \mathbb{R}$, and indicate the solution set on the number line.

(IR *Leaving Certificate Examination*, Ordinary Level, 1994)

$$[x < 3]$$

- 2** Find the solution set: $8 < 2(4 - m)$.

(USA *Southeast Missouri State University: Math Field Day*, 2005)

$$[m < 0]$$

- 3** The length of each leg of an isosceles triangle is $x + 1$ and the length of the base is $3x - 2$. Determine all possible values of x . (The triangle should be nondegenerate; i.e. not just a straight line. Note also that x need not be an integer; your answer should be an inequality.)

(USA *Lehigh University: High School Math Contest*, 2005)

$$\left[\frac{2}{3} < x < 4 \right]$$

GLOSSARY

inequality: disequazione

leg: lato

length: lunghezza

solution set: insieme
delle soluzioni

straight line: linea retta

twice: doppio