



TEST YOUR SKILLS

- 1** Rationalize the denominator and leave in simplest radical form.

$$\sqrt{\frac{10}{12}}$$

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

$$\left[\frac{\sqrt{30}}{6} \right]$$

- 2** TEST For all $x > 0$, $\left(\frac{\sqrt{x^3}}{\sqrt[3]{3x^2}} \right)^5 =$

- A x^2
- B x
- C \sqrt{x}
- D $\sqrt[3]{x}$
- E $\sqrt[4]{x}$

- 3** Show (by the Pythagorean theorem) that a triangle with sides of length 3 cm, 4 cm, and 5 cm is a right angled triangle.

(IR Leaving Certificate Examination, Ordinary Level, 1993)

- 4** TEST Which of the following numbers is nearest in value to the quantity $\sqrt{101} - 10$?

- A $\frac{1}{16}$
- B $\frac{1}{18}$
- C $\frac{1}{20}$
- D $\frac{1}{22}$
- E $\frac{1}{24}$

(USA University of South Carolina: High School Math Contest, 2001)

GLOSSARY

denominator: denominatore
to leave-left-left: lasciare
Pythagorean theorem:
 teorema di Pitagora

quantity: quantità
to rationalize: razionalizzare
right angled triangle:
 triangolo rettangolo

side: lato
simple: semplice
value: valore