



Without using your square root key find the square root of 20 to 2dp.

Find two numbers that differ by 1 and have a product of

- 1) 6
- 2) 56
- 3) 110
- 4) 182
- 5) 272
- 6) 462
- 7) 1190
- 8) 10100
- 9) 3192
- 10) 3540

- 1) $2 \times 3 = 6$
- 2) $8 \times 7 = 56$
- 3) $10 \times 11 = 110$
- 4) $13 \times 14 = 182$
- 5) $16 \times 17 = 272$
- 6) $21 \times 22 = 462$
- 7) $34 \times 35 = 1190$
- 8) $100 \times 101 = 10100$
- 9) $56 \times 57 = 3192$
- 10) $59 \times 60 = 3540$

Solve the equation
 $x^3 + 2x^2 = 120$
 to 2dp using trial and
 improvement.

$$x = 4.35$$

to 2dp

X	$x^3 + 2x^2$	120
4	96	tb
5	175	tb
4.5	131	tb
4.3	116	ts
4.4	123	tb
4.35	120.1	tb
4.34	119	ts
4.345	119	ts

Solve the equation
 $x^2 - 2/x = 5$
 to 2sf using trial and
 improvement.

$$x = 2.4$$

to 2sf

x	$x^2 - \frac{2}{x}$	5
3	8.3	tb
2	3.5	ts
2.5	5.45	tb
2.4	4.9	ts
2.45	5.18	tb
2.43	5.08	tb
2.41	4.9	ts
2.42	5.	

Solve these equations using trial and improvement, to 2 dp.

$$x^5 = 313 \quad x = 3.15$$

$$5^x = 77 \quad x = 2.70$$

$$x^x = 100 \quad 3.60$$

$$n = 2.15$$

The number n has 2 digits after the decimal point
and n to the power 10 is 2110 to the nearest whole number.
Find n .

Attachments

fibonnaci strips.xls