

What Do You Get When You Cross ...

1. A kangaroo with a snake? $\frac{2}{4} \frac{13}{6} \frac{9}{16} \frac{10}{1} \frac{12}{16} \frac{14}{14}$

2. A turtle with a flu shot? $\frac{2}{10} \frac{3}{15} \frac{12}{8} \frac{4}{16} \frac{12}{7} \frac{14}{14}$

3. A yardstick with a steam roller? $\frac{11}{15} \frac{2}{5} \frac{10}{11} \frac{14}{14} \frac{5}{5}$

Find each solution in the answer column. Express irrational solutions as decimals rounded to the nearest tenth. Each time the exercise number appears in the code, write the letter of the solution in the space above it. If the answer has a \bullet , leave the space blank.

Find the value of n that makes the expression a trinomial square.

1 $x^2 + 6x + n$

3 $y^2 + 40y + n$

2 $b^2 - 18b + n$

4 $k^2 - 24k + n$

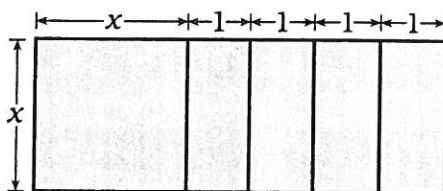
Solve by completing the square.

5 $w^2 - 8w = 65$

9 $c^2 - 12c = 38$

6 $a^2 + 10a = -16$

10 The area of the rectangle below is 60 square units. Find the value of x .

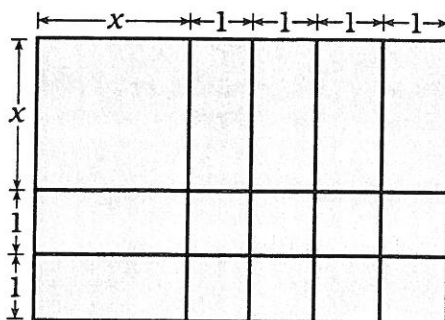


7 $x^2 - 4x = 7$

8 $m^2 + 20m = -70$

11 $p^2 - 8p - 42 = 0$

16 The area of the rectangle below is 99 square units. Find the value of x .



12 $d^2 + 2d - 136 = 0$

13 $x^2 - 30x + 81 = 0$

14 $h^2 + 14h + 3 = 15$

15 $b^2 - 18b + 50 = -10$

Answers 1-4

A 81

\bullet 144

R 9

B 256

S 400

Answers 5-10

W -4.5, -15.5

T 13, -5

I 8

K 5.3, -1.3

\bullet 6

H 8.7, -3.7

U -2, -8

M 14.6, -2.6

Answers 11-16

J 27, 3

D 9

O 10.7, -12.7

P 7

E 0.8, -14.8

F 11.6, -3.6

L 13.6, 4.4

N 9.2, -1.2