

1. Solve:  $3x^2 = 2x$

2. Solve:  $x^2 + 7 = 10x - 18$

3. Solve:  $x(x - 4) = 21$

- 
4. A DVD case is 6 cm longer than it is wide. The area of the rectangular top of the case is  $247 \text{ cm}^2$ . Find the length and width of the case.
5. Find three consecutive odd integers such that the sum of all three is 42 less than the product of the second and third integers.

6. The longer leg of a right triangle is 1 m longer than the shorter leg. The hypotenuse is 1 m shorter than twice the shorter leg. Find the length of the shorter leg of the triangle.

Q: What is harder to catch the faster you run?