

New Jersey City University
Intermediate Algebra
Peer Led Team Learning Workshop 6A
More about Factoring (Applied Problems)

1. Section 5.8 — Number problem

The product of two consecutive integers is 132.

- a) If we mark one of the numbers as x , express the second the number in terms of x .
- b) Find the two numbers.

2. Section 5.8 — Geometry problem

The hypotenuse of a right triangle is 12 inches. One of the legs is 3 inches less than double the other.

- a) If the length of the shorter leg is x , express the longer leg in terms of x .
- b) Build an equation about x by using the Pythagorean Theorem.
- c) Find the lengths of the two legs.