Exercises: Common divisors and Euclid's algorithm

1. List the divisors of 48 and 56. What is their greatest common divisor?

2. (a) Write 56 in the form $56 = q(48) + r$ where q and r are quotient and remainder.

   (b) Consequently, write the greatest common divisor in the form $s(48) + t(56)$.

3. (a) Use Euclid's Algorithm to find the greatest common divisor of 216 and 196.

   (b) Use Euclid's Algorithm to find the greatest common divisor of 357 and 798.

(c) Use Euclid's Algorithm to show 795 and 539 are coprime.

4. Write each greatest common divisor above in terms of the two integers.

(a)

(b)

(c)