1 def gcd(x, y):

2 if x < 0:

3 x = -x

4 if y < 0:

5 y = -y

6 while y != 0:

7 rem = x % y

8 x = y

9 y = rem

10 return x

1 from math import \*

2

3 def square\_equal(a, b, c):

4 if a != 0:

5 D = b\*b - 4\*a\*c

6 if D > 0:

7 x1 = (-b - sqrt(D)) / (2\*a)

8 x2 = (-b + sqrt(D)) / (2\*a)

9 return str(x1) + ' and ' + str(x2)

10 elif D == 0:

11 return str(-b / (2\*a))

12 else:

13 return 'no roots'

14 else:

15 if b != 0:

16 return str(-c / b)

17 else:

18 return 'no roots'

1 def remove\_digit(number, digit):

2 res = 0

3 power = 1

4 while number > 0:

5 cur\_digit = number % 10

6 if cur\_digit != digit:

7 res = res + cur\_digit \* power

8 power = power \* 10

9 number = number // 10

10 return res

1 def hex(number):

2 if number == 0:

3 return '0'

4 res = ''

5 while number > 0:

6 digit = number % 16

7 if digit <= 9:

8 digit = str(digit)

9 elif digit <= 13:

10 if digit <= 11:

11 if digit == 10:

12 digit = 'A'

13 else:

14 digit = 'B'

15 elif digit == 12:

16 digit = 'C'

17 else:

18 digit = 'D'

19 elif digit == 14:

20 digit = 'E'

21 else:

22 digit = 'F'

23 res = digit + res

24 number = number // 16

25 return res

1 def factorize(n):

2 res = ''

3 while n > 2 and n % 2 == 0:

4 res = res + '2\*'

5 n = n // 2

6 d = 3

7 while n > d:

8 if n % d == 0:

9 res = res + str(d) + '\*'

10 n = n // d

11 else:

12 d = d + 2

13 return res + str(n)