

HW6 M1

Answer (for reference only)

1.

- a) $A(:, [1, 4]) = [];$
- b) $X(2) = X(2)*5;$
- c) $A(:, [2, 3]) = A(:, [3, 2]);$
- d) $B = [A(:, 3), A(:, 1), A(:, 5)];$

2.

```
function ans = extended_euclidean(a, b)
    if(a==0)
        ans = [b, 0, 1];
        return;
    end
    gcd = extended_euclidean(mod(b, a), a);

    x1 = gcd(2);
    y1 = gcd(3);

    x = y1 - fix(b/a)*x1;
    y = x1;

    ans = [gcd(1), x, y];
end
```