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# QUESTION 3:

```matlab
% Pose from Figure 1.15 (a)

% Connected to (0, 0) aka (x, y)
u1 = 1; v1 = 2;

% Connected to (x1, 0)
u2 = 2; v2 = 1;

% Connected to (x2, y2)
u3 = 2; v3 = 3;

x1 = 4; x2 = 0; y2 = 4;

figure(2)
plot([u1 u2 u3 u1], [v1 v2 v3 v1], 'r'); hold on        % Platform triangle
plot([0 x1 x2], [0 0 y2], 'bo')                         % Base anchors
plot([u1 u2 u3], [v1 v2 v3], 'ro', 'MarkerSize', 8, 'MarkerFaceColor', 'r')
% Platform joints
plot([u1 0], [v1 0], 'k--')    % p1
plot([u2 x1], [v2 0], 'k--')   % p2
plot([u3 x2], [v3 y2], 'k--')  % p3
title('Figure 1.15 (a)')
xlabel('x')
ylabel('y')
drawnow;

% Pose from Figure 1.15 (b)

% Connected to (0, 0) aka (x, y)
u1 = 2; v1 = 1;

% Connected to (x1, 0)
u2 = 3; v2 = 2;

% Connected to (x2, y2)
u3 = 1; v3 = 2;

x1 = 4; x2 = 0; y2 = 4;

figure(3)
plot([u1 u2 u3 u1], [v1 v2 v3 v1], 'r'); hold on        % Platform triangle
plot([0 x1 x2], [0 0 y2], 'bo')                         % Base anchors
plot([u1 u2 u3], [v1 v2 v3], 'ro', 'MarkerSize', 8, 'MarkerFaceColor', 'r')
% Platform joints
plot([u1 0], [v1 0], 'k--')    % p1
```
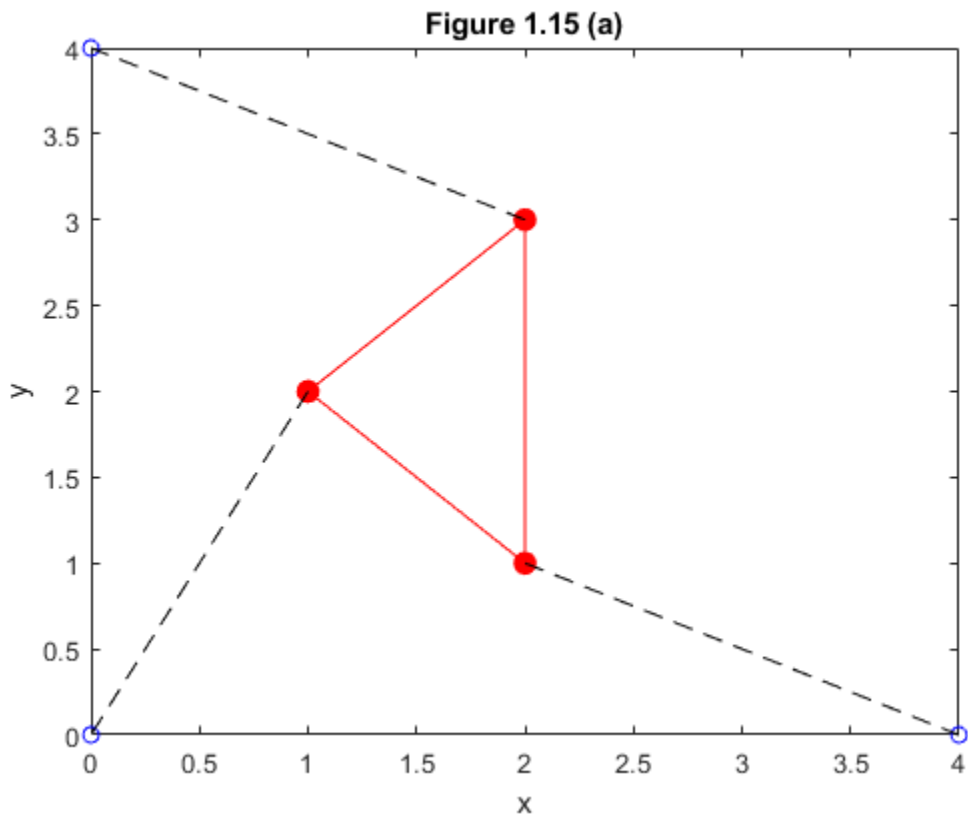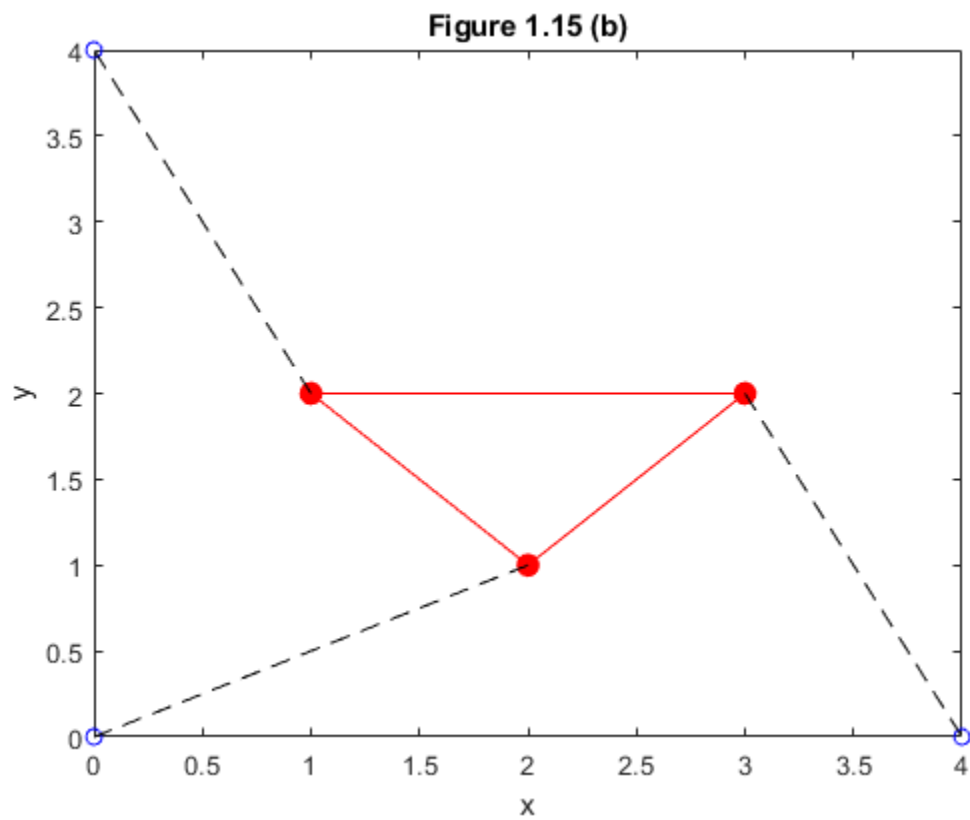
```
plot([u2 x1], [v2 0], 'k--')    % p2
plot([u3 x2], [v3 y2], 'k--')   % p3
title('Figure 1.15 (b)')
xlabel('x')
ylabel('y')
drawnow;

% Here, we're just reproducing Figure 1.15 (a) and (b)
```



Figure 1.15 (a)

Figure 1.15 (b)

*Published with MATLAB® R2024b*