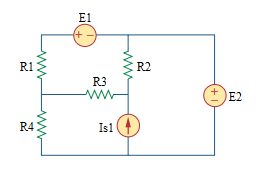
3.44 Main Question (สำหรับแสดงข้อสอบ)



Given *E*1 = 4 V, *E*2 = 6 V, *Is*1 = 10 A, *R*1 = 4 Ω, *R*2 = 2 Ω, *R*3 = 8 Ω, *R*4 = 5 Ω.

Find

Variables (สำหรับเขียนโค้ดเพื่อหาคำตอบ)

Random variables

E1 = {1:10}; E2 = {1:10}; IS1 = {1:10};

R1 = {1:10}; R2 = {1:10}; R3 = {1:10}; R4 = {1:10};

Global variables

#E1 = 4; E2 = 6; IS1 = 10; R1 = 4; R2 = 2; R3 = 8; R4 = 5;

Z11 = R1+R2+R3; Z12 = -R2; Z13 = -R3;

Z21 = -R2-R3; Z22 = R2; Z23 = R3+R4;

Z31 = 0; Z32 = -1; Z33 = 1;

V1 = -E1; V2 = -E2; V3 = -IS1;

D = Z11\*Z22\*Z33+Z12\*Z23\*Z31+Z13\*Z21\*Z32-Z31\*Z22\*Z13-Z32\*Z23\*Z11-Z33\*Z21\*Z12;

D1 = V1\*Z22\*Z33+Z12\*Z23\*V3+Z13\*V2\*Z32-V3\*Z22\*Z13-Z32\*Z23\*V1-Z33\*V2\*Z12;

D2 = Z11\*V2\*Z33+V1\*Z23\*Z31+Z13\*Z21\*V3-Z31\*V2\*Z13-V3\*Z23\*Z11-Z33\*Z21\*V1;

D3 = Z11\*Z22\*V3+Z12\*V2\*Z31+V1\*Z21\*Z32-Z31\*Z22\*V1-Z32\*V2\*Z11-V3\*Z21\*Z12;

I1 = D1/D; I2 = D2/D; I3 = D3/D;

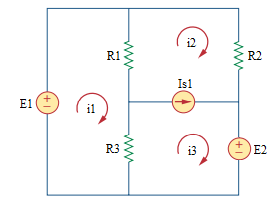
Part (กรอกคำตอบ)

1. *I*1 = I1 = -0.1818 A

2. *I*2 = I2 = 8.1455 A

2. *I*3 = I3 = -1.845 A

3.52 Main Question (สำหรับแสดงข้อสอบ)



Given *E*1 = 5 V, *E*2 = 10 V, *Is*1 = 10 A, *R*1 = 4 Ω, *R*2 = 6 Ω, *R*3 = 2 Ω.

Find

Variables (สำหรับเขียนโค้ดเพื่อหาคำตอบ)

Random variables

E1 = {1:10}; E2 = {1:10}; IS1 = {1:10};

R1 = {1:10}; R2 = {1:10}; R3 = {1:10};

Global variables

#E1 = 5; E2 = 10; IS1 = 10; R1 = 4; R2 = 6; R3 = 2;

Z11 = R1+R3; Z12 = -R1; Z13 = -R3;

Z21 = -R1-R3; Z22 = R1+R2; Z23 = R3;

Z31 = 0; Z32 = -1; Z33 = 1;

V1 = E1; V2 = 0; V3 = IS1-E2;

D = Z11\*Z22\*Z33+Z12\*Z23\*Z31+Z13\*Z21\*Z32-Z31\*Z22\*Z13-Z32\*Z23\*Z11-Z33\*Z21\*Z12;

D1 = V1\*Z22\*Z33+Z12\*Z23\*V3+Z13\*V2\*Z32-V3\*Z22\*Z13-Z32\*Z23\*V1-Z33\*V2\*Z12;

D2 = Z11\*V2\*Z33+V1\*Z23\*Z31+Z13\*Z21\*V3-Z31\*V2\*Z13-V3\*Z23\*Z11-Z33\*Z21\*V1;

D3 = Z11\*Z22\*V3+Z12\*V2\*Z31+V1\*Z21\*Z32-Z31\*Z22\*V1-Z32\*V2\*Z11-V3\*Z21\*Z12;

I1 = D1/D; I2 = D2/D; I3 = D3/D;

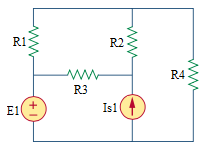
Part (กรอกคำตอบ)

1. *I*1 = I1 = 1.667 A

2. *I*2 = I2 = 0.8333 A

2. *I*3 = I3 = 0.8333 A

3.50 Main Question (สำหรับแสดงข้อสอบ)



Given *E*1 = 4 V, *Is*1 = 10 A, *R*1 = 4 Ω, *R*2 = 2 Ω, *R*3 = 8 Ω, *R*4 = 4 Ω.

Find

Variables (สำหรับเขียนโค้ดเพื่อหาคำตอบ)

Random variables

E1 = {1:10}; IS1 = {1:10};

R1 = {1:10}; R2 = {1:10}; R3 = {1:10}; R4 = {1:10};

Global variables

#E1 = 4; IS1 = 10; R1 = 4; R2 = 2; R3 = 8; R4 = 4;

Z11 = R1+R2+R3; Z12 = -R3; Z13 = -R2;

Z21 = -R2-R3; Z22 = R3; Z23 = R2+R4;

Z31 = 0; Z32 = -1; Z33 = 1;

V1 = 0; V2 = E1; V3 = IS1;

D = Z11\*Z22\*Z33+Z12\*Z23\*Z31+Z13\*Z21\*Z32-Z31\*Z22\*Z13-Z32\*Z23\*Z11-Z33\*Z21\*Z12;

D1 = V1\*Z22\*Z33+Z12\*Z23\*V3+Z13\*V2\*Z32-V3\*Z22\*Z13-Z32\*Z23\*V1-Z33\*V2\*Z12;

D2 = Z11\*V2\*Z33+V1\*Z23\*Z31+Z13\*Z21\*V3-Z31\*V2\*Z13-V3\*Z23\*Z11-Z33\*Z21\*V1;

D3 = Z11\*Z22\*V3+Z12\*V2\*Z31+V1\*Z21\*Z32-Z31\*Z22\*V1-Z32\*V2\*Z11-V3\*Z21\*Z12;

I1 = D1/D; I2 = D2/D; I3 = D3/D;

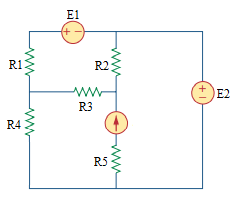
Part (กรอกคำตอบ)

1. *I*1 = I1 = -2.9167 A

2. *I*2 = I2 = -6.0833 A

2. *I*3 = I3 = -3.9167 A

3.444 Main Question (สำหรับแสดงข้อสอบ)



Given *E*1 = 4 V, *E*2 = 6 V, *Is*1 = 10 A, *R*1 = 4 Ω, *R*2 = 2 Ω, *R*3 = 8 Ω, *R*4 = 5 Ω, *R*5 = 5 Ω.

Find

Variables (สำหรับเขียนโค้ดเพื่อหาคำตอบ)

Random variables

E1 = {1:10}; E2 = {1:10}; IS1 = {1:10};

R1 = {1:10}; R2 = {1:10}; R3 = {1:10}; R4 = {1:10}; R5 = {1:10};

Global variables

#E1 = 4; E2 = 6; IS1 = 10; R1 = 4; R2 = 2; R3 = 8; R4 = 5; R5 = 5;

Z11 = R1+R2+R3; Z12 = -R2; Z13 = -R3;

Z21 = -R2-R3; Z22 = R2; Z23 = R3+R4;

Z31 = 0; Z32 = -1; Z33 = 1;

V1 = -E1; V2 = -E2; V3 = -IS1;

D = Z11\*Z22\*Z33+Z12\*Z23\*Z31+Z13\*Z21\*Z32-Z31\*Z22\*Z13-Z32\*Z23\*Z11-Z33\*Z21\*Z12;

D1 = V1\*Z22\*Z33+Z12\*Z23\*V3+Z13\*V2\*Z32-V3\*Z22\*Z13-Z32\*Z23\*V1-Z33\*V2\*Z12;

D2 = Z11\*V2\*Z33+V1\*Z23\*Z31+Z13\*Z21\*V3-Z31\*V2\*Z13-V3\*Z23\*Z11-Z33\*Z21\*V1;

D3 = Z11\*Z22\*V3+Z12\*V2\*Z31+V1\*Z21\*Z32-Z31\*Z22\*V1-Z32\*V2\*Z11-V3\*Z21\*Z12;

I1 = D1/D; I2 = D2/D; I3 = D3/D;

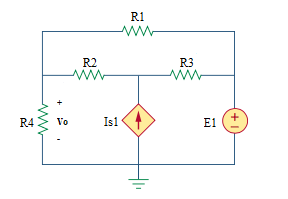
Part (กรอกคำตอบ)

1. *I*1 = I1 = -0.1818 A

2. *I*2 = I2 = 8.1455 A

2. *I*3 = I3 = -1.8545 A

3.49 Main Question (สำหรับแสดงข้อสอบ)



Given *E*1 = 6V, *Is*1 = 2vo A, *R*1 = 3 Ω, *R*2 = 1 Ω, *R*3 = 2 Ω, *R*4 = 2 Ω

Find

Variables (สำหรับเขียนโค้ดเพื่อหาคำตอบ)

Random variables

E1 = {1:10};

R1 = {1:10}; R2 = {1:10}; R3 = {1:10}; R4 = {1:10};

Global variables

#E1 = 27; R1 = 3; R2 = 1; R3 = 2; R4 = 2;

Z11 = R1+R2+R3; Z12 = -R3; Z13 = -R2;

Z21 = -R2-R3; Z22 = R3; Z23 = R2+R4;

Z31 = 0; Z32 = -1; Z33 = 1;

V1 = 0; V2 = -E1; V3 = -1;

D = Z11\*Z22\*Z33+Z12\*Z23\*Z31+Z13\*Z21\*Z32-Z31\*Z22\*Z13-Z32\*Z23\*Z11-Z33\*Z21\*Z12;

D1 = V1\*Z22\*Z33+Z12\*Z23\*V3+Z13\*V2\*Z32-V3\*Z22\*Z13-Z32\*Z23\*V1-Z33\*V2\*Z12;

D2 = Z11\*V2\*Z33+V1\*Z23\*Z31+Z13\*Z21\*V3-Z31\*V2\*Z13-V3\*Z23\*Z11-Z33\*Z21\*V1;

D3 = Z11\*Z22\*V3+Z12\*V2\*Z31+V1\*Z21\*Z32-Z31\*Z22\*V1-Z32\*V2\*Z11-V3\*Z21\*Z12;

I1 = D1/D; I2 = D2/D; I3 = D3/D;

Part (กรอกคำตอบ)

1. *I*1 = I1 = -3.666 A

2. *I*2 = I2 = -7 A

2. *I*3 = I3 = -8 A