Unit 6 - Week 4

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Week 4 Assignment 4

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2019-08-28, 23:59 IST.

1) The mesh analysis in simple resistive circuit is related to *1 point*

a. Junction currents
b. Battery emf
c. IR drops
d. Both b and c

○ a.
○ b.
○ c.
○ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
d.

2) Calculate the power delivered (apprx.) by 100V source in the network shown in Fig. 1. *1 point*

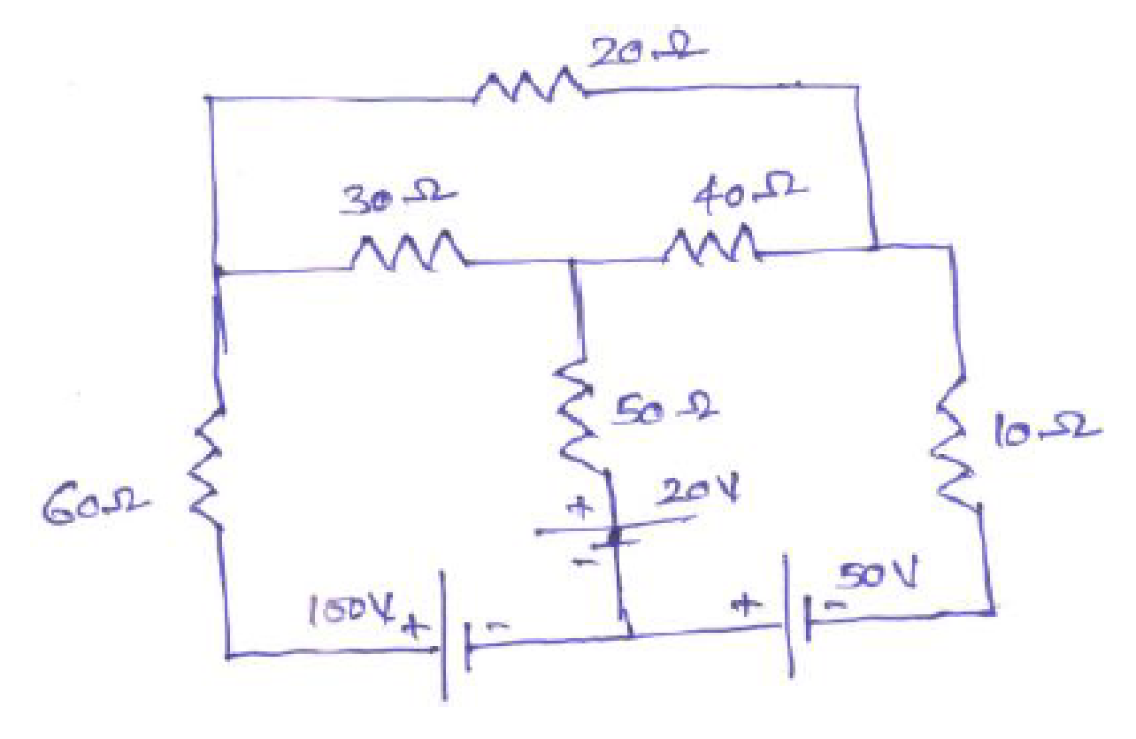

Fig. 1

a. 162 - 167
b. 250 - 254
c. 502 - 506
d. 326 - 330

○ a.
○ b.
○ c.
○ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
a.

3) Find the voltage V_{ab} in the network shown in Fig. 2. *1 point*

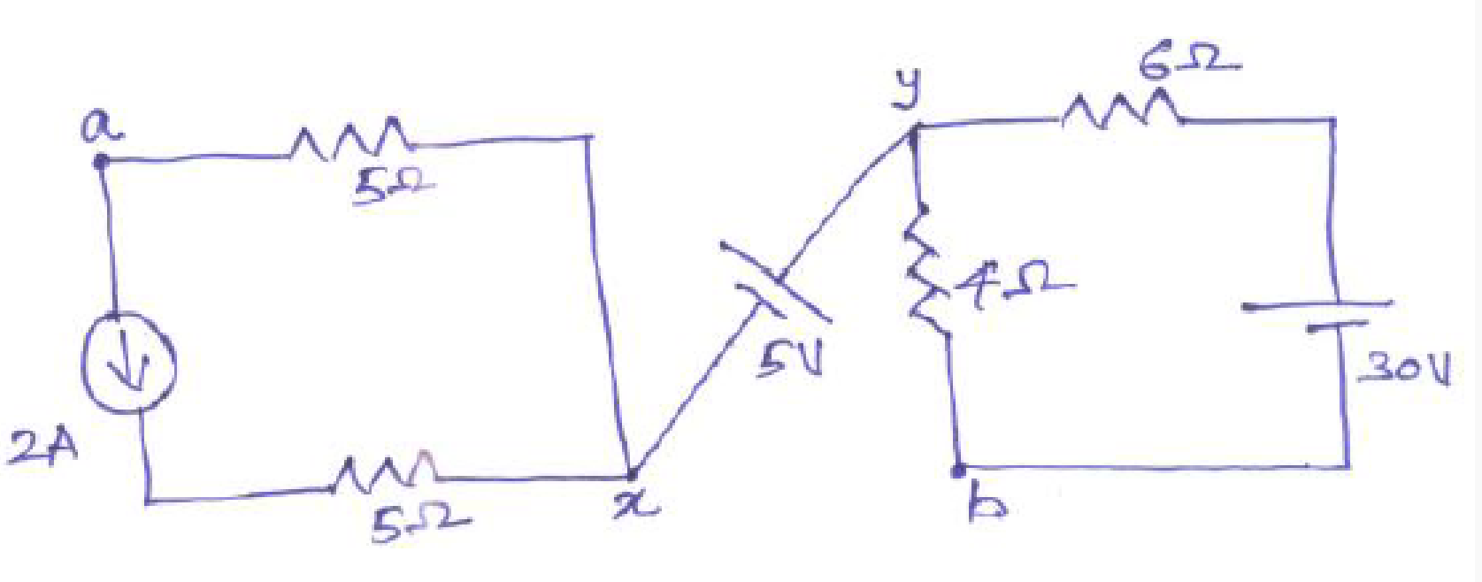

Fig. 2

a. -2
b. -3
c. -4
d. -5

○ a.
○ b.
○ c.
○ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
b.

4) *0 points*

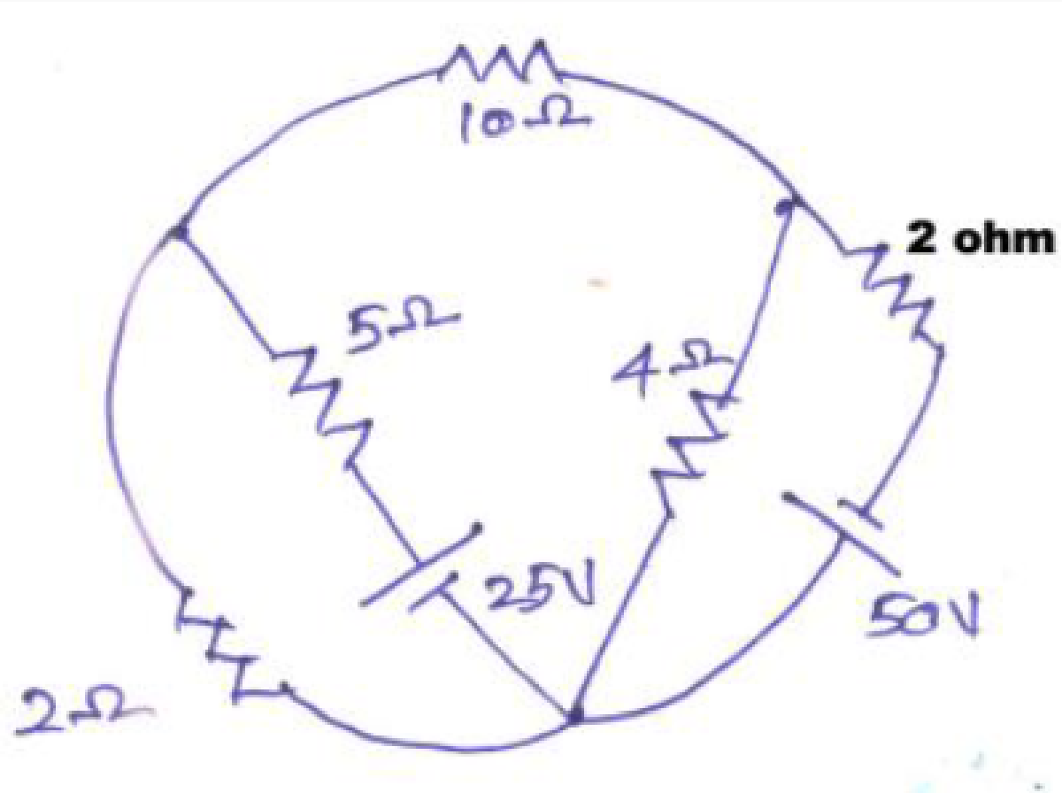

Fig. 3

The power dissipated in 10 Ω resistor in the network shown in Fig. 3 is?

a. 315 – 319 W
b. 415 – 419 W
c. 372 – 376 W
d. 472 – 476 W

○ a.
○ b.
○ c.
○ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
a.

5) *1 point*

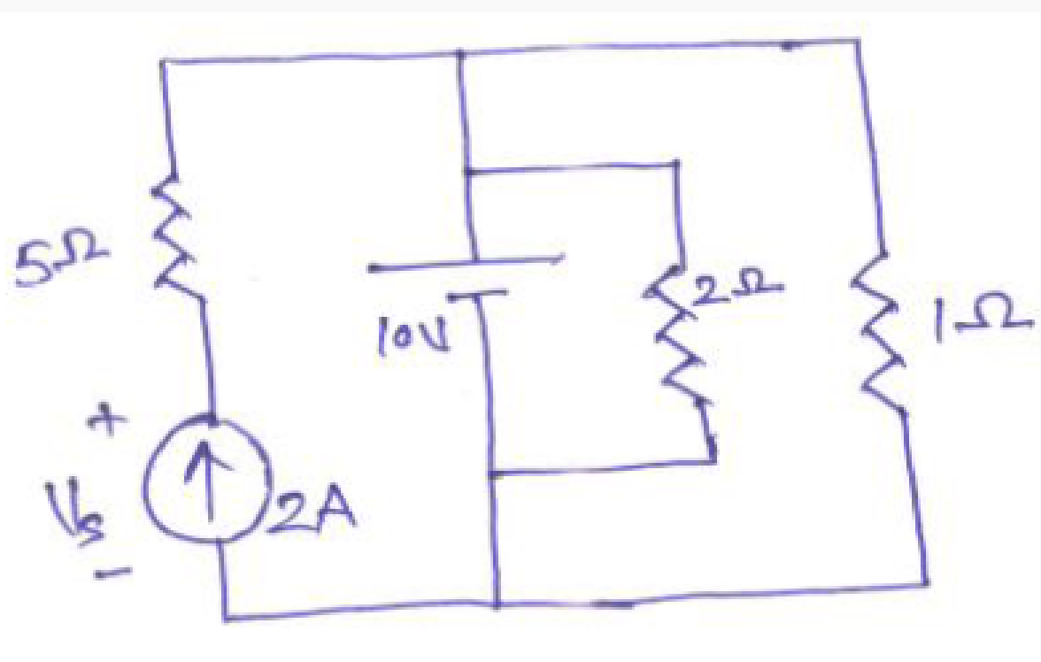

Fig. 4

The voltage V_s across the current source in the network shown in Fig. 4

a. 5 V
b. 10 V
c. 15 V
d. 20 V

○ a.
○ b.
○ c.
○ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
d.

6) *1 point*

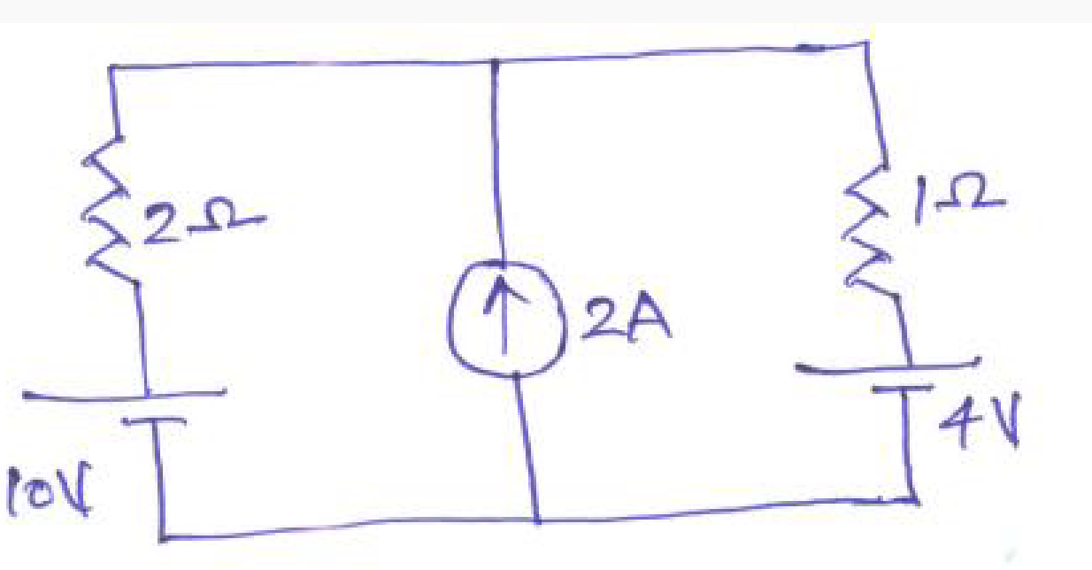

Fig. 5

The value of current in 2 Ω resistor given in network shown in Fig. 5.

a. 1.31 – 1.35 A
b. 1.40 – 1.44 A
c. 2.24 – 2.28 A
d. 2.80 – 2.84 A

○ a.
○ b.
○ c.
○ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
a.

7) *1 point*

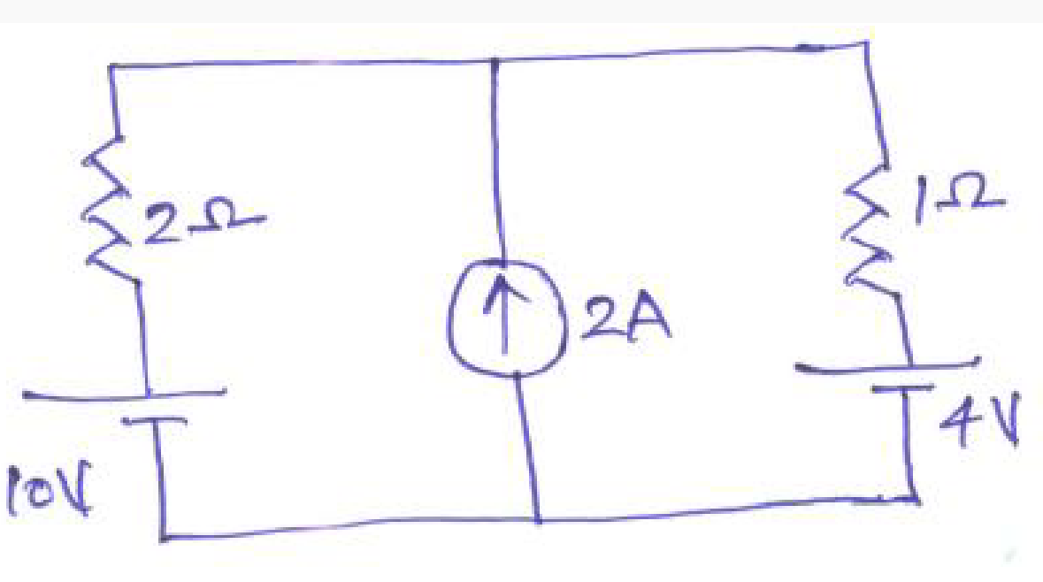

Fig. 6

The value of current in 1 Ω resistor given in network shown in Fig. 6

a. 1.31 – 1.35 A
b. 3..40 – 3.44 A
c. 3.31 – 3.35 A
d. 3.80 – 3.84 A

○ a.
○ b.
○ c.
○ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
c.

8) Between the branch voltages of a loop the KVL imposes. *1 point*

a. Nonlinear constraints
b. Linear constraints
c. No constraints
d. None

○ a.
○ b.
○ c.
○ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
b.

9) *1 point*

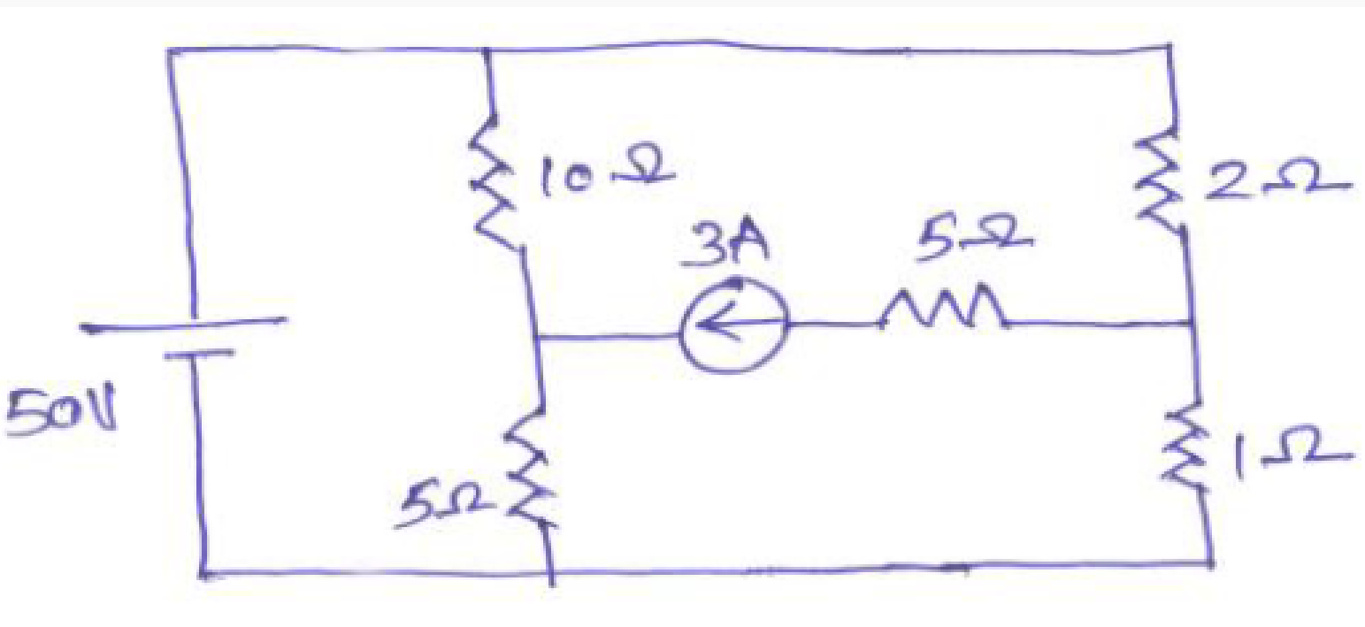

Fig. 7

The current delivered by the 50V source for the network given in Fig. 7.

a. -20 A
b. 20 A
c. -10 A
d. 10 A

○ a.
○ b.
○ c.
○ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
b.

10) *1 point*

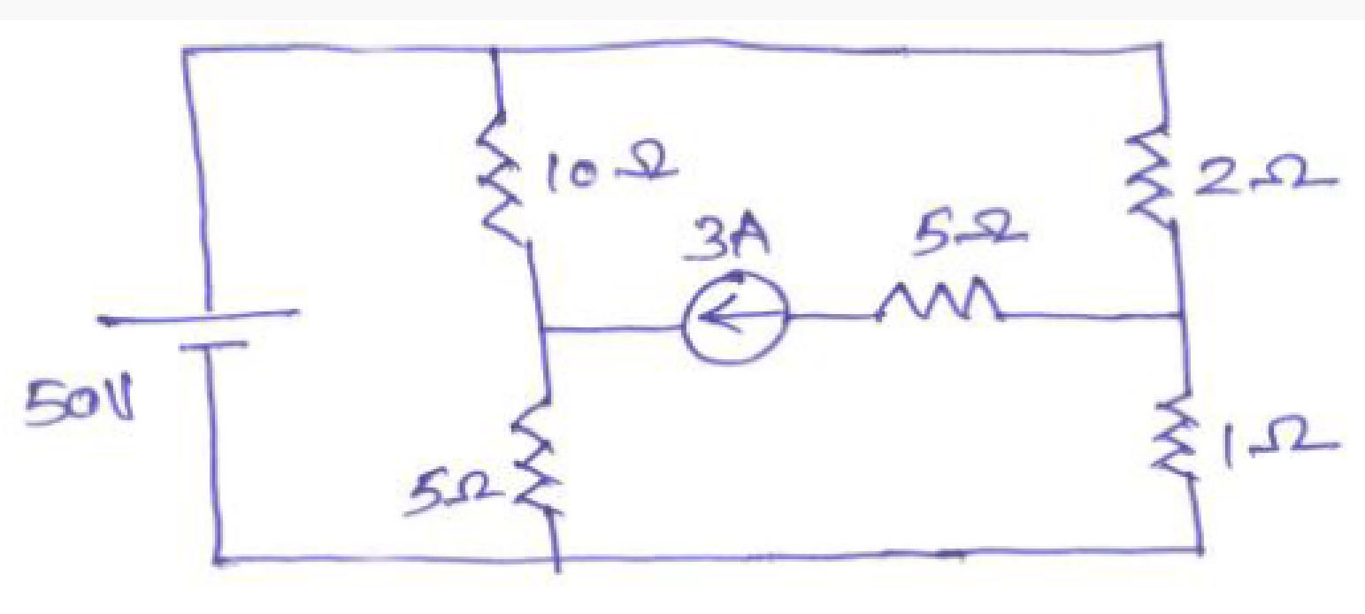

Fig. 8

The current through 2 Ω resistor given in network shown in Fig. 8.

a. 15.31 – 15.35 A
b. 27.84 – 27.88 A
c. 17.64 – 17.68 A
d. 13.80 – 13.84 A

○ a.
○ b.
○ c.
○ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
c.

11) *1 point*

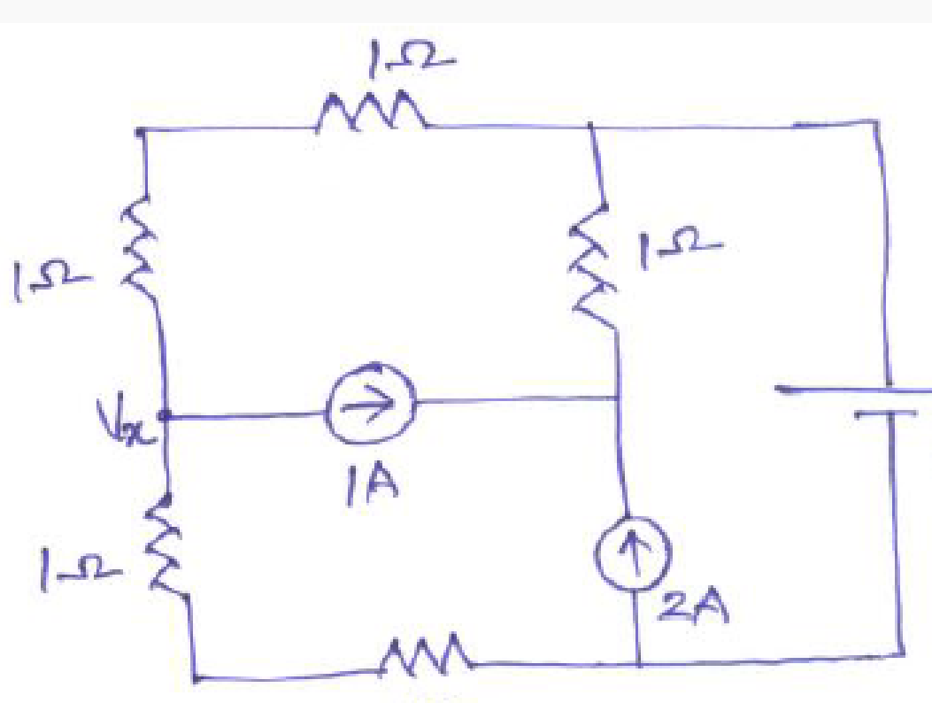

Fig. 9

The voltage V_x given in network shown in Fig. 9 is

a. 3
b. 4
c. 5
d. 6

○ a.
○ b.
○ c.
○ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
b.

12) If $R_1 = R_2 = R_4 = R$ and $R_3 = 1.1R$ in the network shown in Fig. 10. The voltage between terminals a and b is? *0 points*

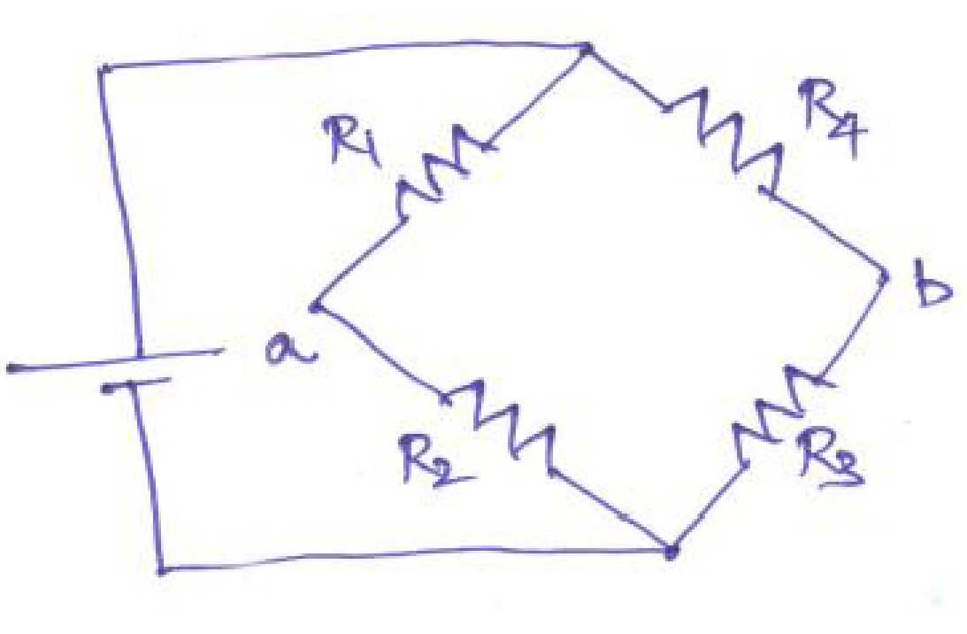

Fig. 10

a. 0.22 – 0.26
b. 0.54 – 0.58
c. 0.35 – 0.39
d. 0.45 – 0.49

○ a.
○ b.
○ c.
○ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
a.