I. Find the value of each of the variables.

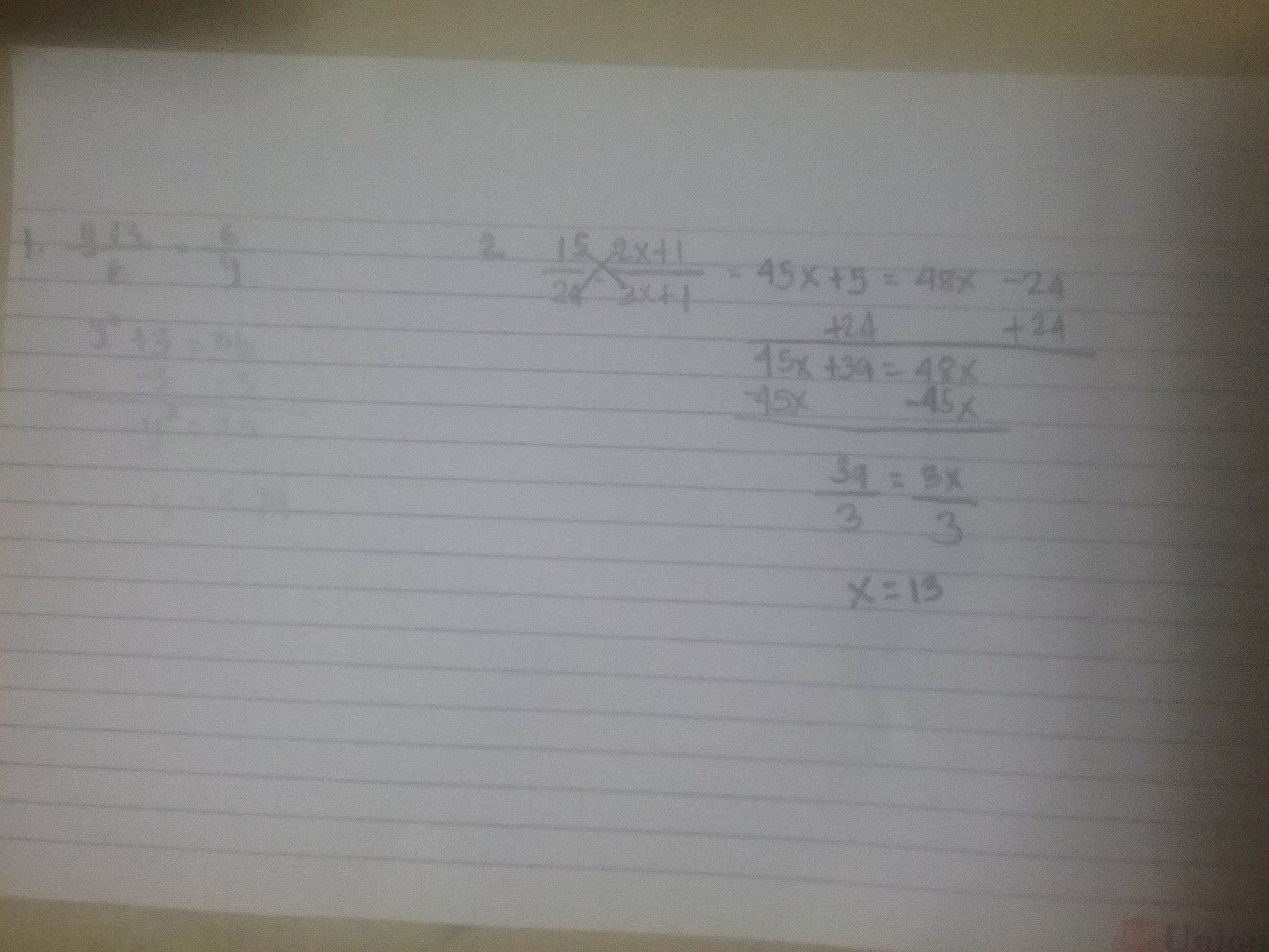
6

10

y

y+3

1.



y = 5.74

A

B

E

C

D

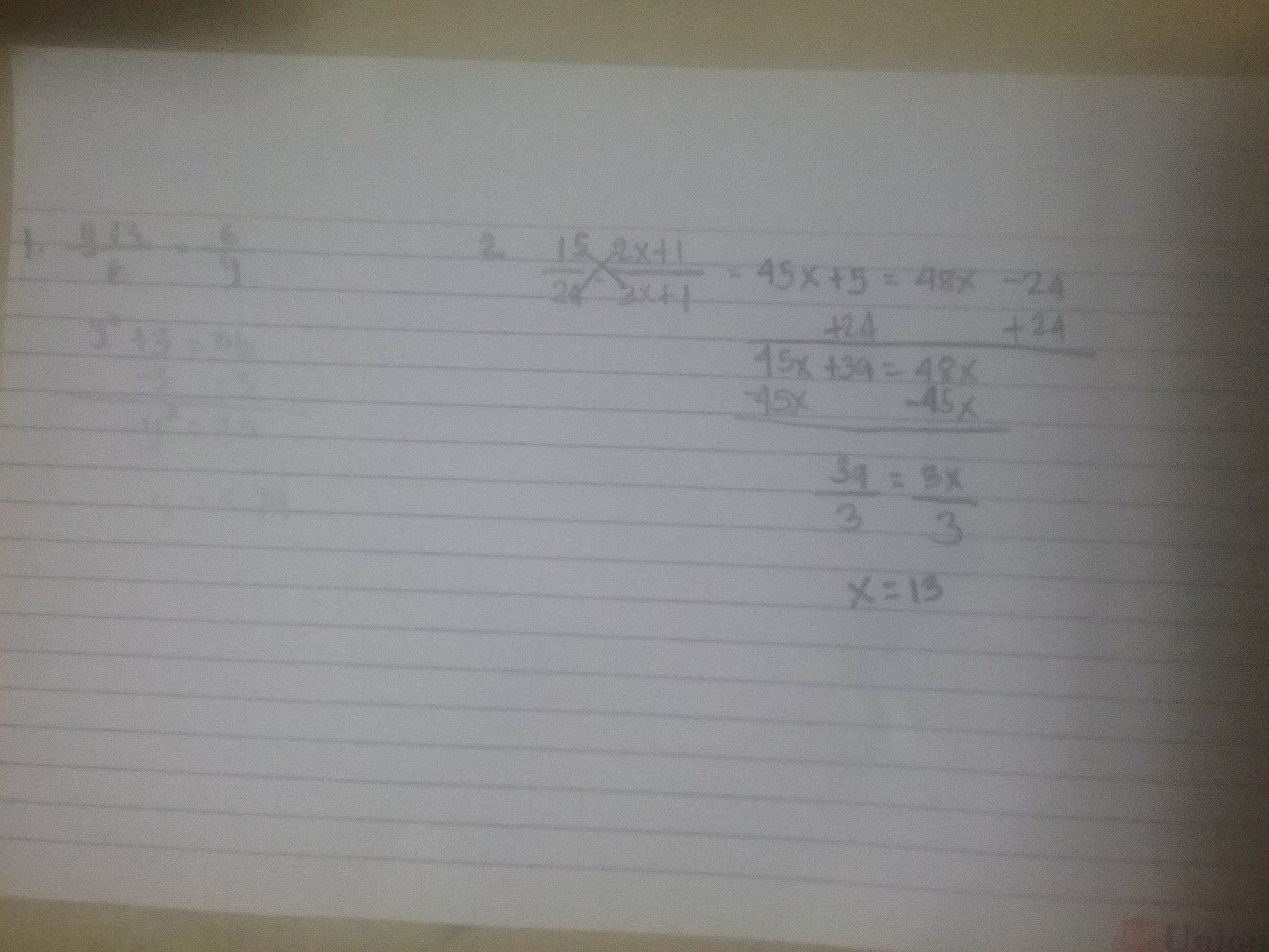
15

24

2x-1

3x+1

2.



x = 13

3.

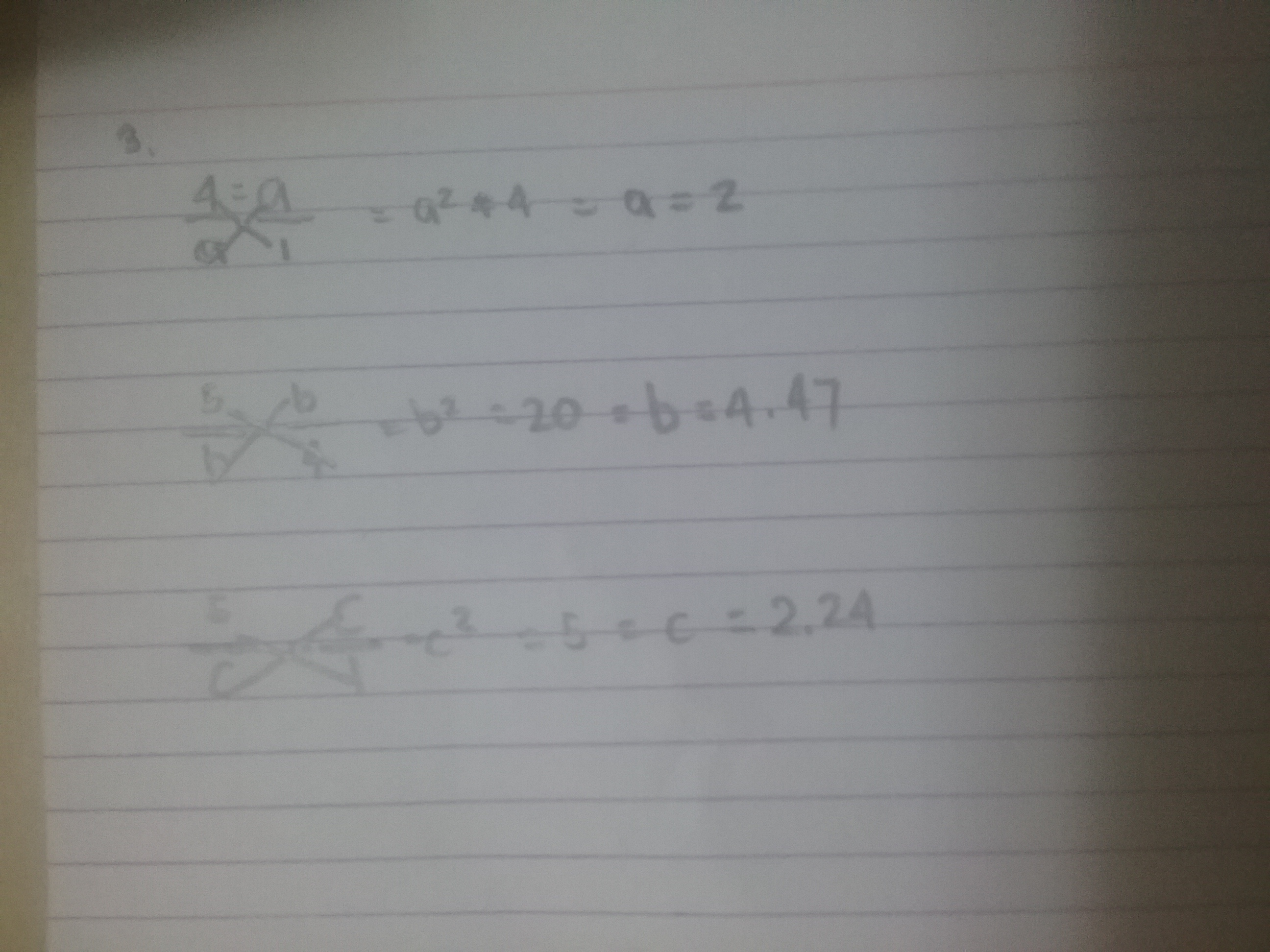
1

4

c

b

a



A = 2

B = 4.47

C = 2.24

III. Prove each of the following.

1. Two isosceles triangles are similar if a base angle of one is congruent to a base angle of the other.

Given: Isosceles triangle XYZ and Isosceles triangle QRS;

Prove:

X

Y

Z

Q

R

S

|  |  |
| --- | --- |
| STATEMENT | REASON |
| 1. Isosceles triangle XYZ and Isosceles triangle QRS; | Given |
| 2. and | Definition of an Isosceles triangle |
| 3. | TPE |
| 4. | AA Theorem |