

Worksheet

09/16/2020

Free on dw-math.com

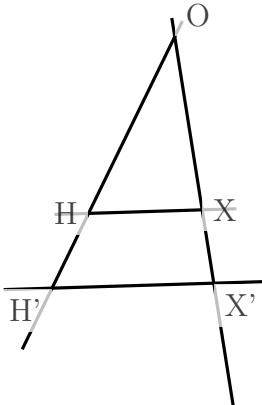
Problem quickname: 3140

1)

Which statements are true? Check them.

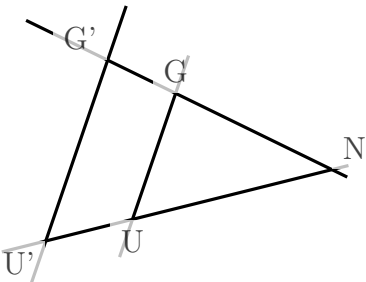
Quick:
3140

a)



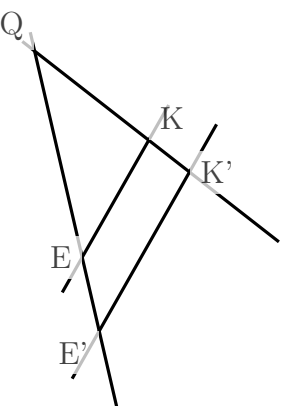
$$\begin{aligned} \sqrt{\frac{|HH'|}{|XX'|}} &= \frac{|OH'|}{|OX'|} \\ \sqrt{\frac{|XX'|}{|HH'|}} &= \frac{|OX|}{|OH|} \\ \times \frac{|HH'|}{|XX'|} &= \frac{|OX'|}{|OH'|} \\ \sqrt{\frac{|HH'|}{|OH'|}} &= \frac{|XX'|}{|OX'|} \end{aligned}$$

b)



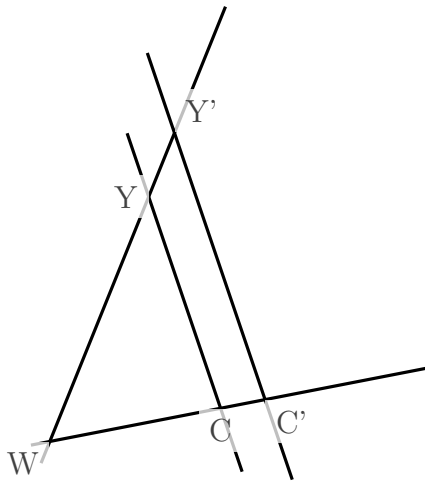
$$\begin{aligned} \times \frac{|GG'|}{|UU'|} &= \frac{|NU|}{|NG|} \\ \times \frac{|UU'|}{|GG'|} &= \frac{|NG|}{|NU|} \\ \times \frac{|NG'|}{|NG|} &= \frac{|NU|}{|NU'|} \\ \sqrt{\frac{|UU'|}{|GG'|}} &= \frac{|NU'|}{|NG'|} \end{aligned}$$

c)



$$\begin{aligned} \sqrt{\frac{|KK'|}{|EE'|}} &= \frac{|QK|}{|QE|} \\ \times \frac{|QE'|}{|QE|} &= \frac{|QK|}{|QK'|} \\ \sqrt{\frac{|KK'|}{|EE'|}} &= \frac{|QK'|}{|QE'|} \\ \sqrt{\frac{|EE'|}{|QE|}} &= \frac{|KK'|}{|QK|} \end{aligned}$$

d)



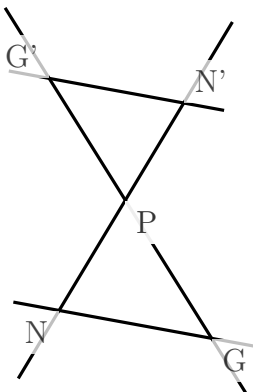
$$\begin{aligned} \sqrt{\frac{|WC|}{|WY|}} &= \frac{|WC'|}{|WY'|} \\ \sqrt{\frac{|WY|}{|WC|}} &= \frac{|WY'|}{|WC'|} \\ \sqrt{\frac{|WC'|}{|WC|}} &= \frac{|WY'|}{|WY|} \\ \times \frac{|CC'|}{|WC'|} &= \frac{|WY'|}{|YY'|} \end{aligned}$$

2)

Which statements are true? Check them.

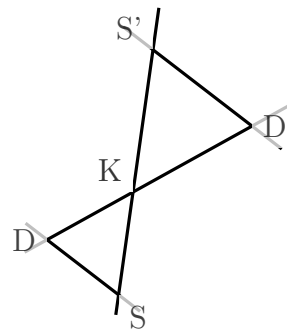
Quick:
3140

a)



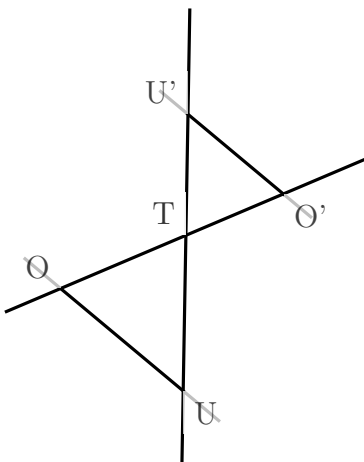
$$\begin{aligned} \times \frac{|GG'|}{|NN'|} &= \frac{|PN|}{|PG|} \\ \times \frac{|PN'|}{|PN|} &= \frac{|PG|}{|PG'|} \\ \sqrt{\frac{|NN'|}{|GG'|}} &= \frac{|PN|}{|PG|} \\ \sqrt{\frac{|PN|}{|PG|}} &= \frac{|PN'|}{|PG'|} \end{aligned}$$

b)



$$\begin{aligned} \times \frac{|DD'|}{|SS'|} &= \frac{|KS|}{|KD|} \\ \times \frac{|KD|}{|KD'|} &= \frac{|KS'|}{|KS|} \\ \times \frac{|SS'|}{|DD'|} &= \frac{|KD'|}{|KS'|} \\ \sqrt{\frac{|DD'|}{|SS'|}} &= \frac{|KD'|}{|KS'|} \end{aligned}$$

c)



$$\begin{aligned} \sqrt{\frac{|OO'|}{|UU'|}} &= \frac{|TO|}{|TU|} \\ \sqrt{\frac{|UU'|}{|OO'|}} &= \frac{|TU|}{|TO|} \\ \sqrt{\frac{|UU'|}{|OO'|}} &= \frac{|TU'|}{|TO'|} \\ \times \frac{|TO'|}{|OO'|} &= \frac{|UU'|}{|TU'|} \end{aligned}$$

d)

$$\begin{aligned} \sqrt{\frac{|PP'|}{|TP'|}} &= \frac{|RR'|}{|TR'|} \\ \times \frac{|PP'|}{|RR'|} &= \frac{|TR|}{|TP|} \\ \sqrt{\frac{|RR'|}{|PP'|}} &= \frac{|TR|}{|TP|} \\ \times \frac{|RR'|}{|TP|} &= \frac{|P'R'|}{|TP'|} \end{aligned}$$

3)

Which statements are true? Check them.

Quick:
3140

a)

$$\begin{aligned} \sqrt{\frac{|XU|}{|X'U'|}} &= \frac{|TX|}{|TX'|} \\ \times \frac{|XU|}{|X'U'|} &= \frac{|TX|}{|TX'|} \\ \times \frac{|UU'|}{|TX|} &= \frac{|X'U'|}{|TX'|} \\ \sqrt{\frac{|X'U'|}{|XU|}} &= \frac{|TU'|}{|TU|} \end{aligned}$$

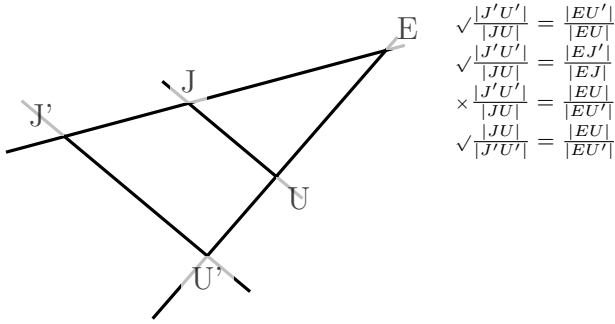
b)

$$\begin{aligned} \sqrt{\frac{|K'A'|}{|KA|}} &= \frac{|UA'|}{|UA|} \\ \times \frac{|KA|}{|K'A'|} &= \frac{|UK'}{|UK|} \\ \sqrt{\frac{|K'A'|}{|KA|}} &= \frac{|UK'}{|UK|} \\ \times \frac{|K'A'|}{|KA|} &= \frac{|UK|}{|UK'|} \end{aligned}$$

c)

$$\begin{aligned} \sqrt{\frac{|TC|}{|T'C'|}} &= \frac{|HT|}{|HT'|} \\ \sqrt{\frac{|T'C'|}{|TC|}} &= \frac{|HC'|}{|HC|} \\ \times \frac{|CC'|}{|HT|} &= \frac{|T'C'|}{|HT'|} \\ \times \frac{|TC|}{|T'C'|} &= \frac{|HT'}{|HT|} \end{aligned}$$

d)



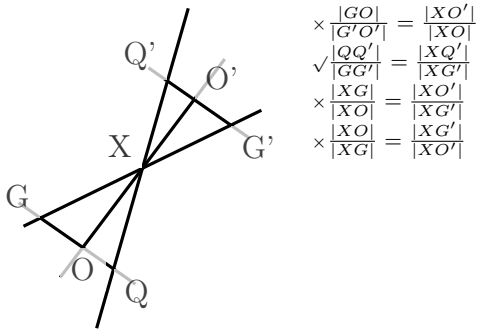
$$\begin{aligned} \sqrt{\frac{|J'U'|}{|JU|}} &= \frac{|EU'|}{|EU|} \\ \sqrt{\frac{|J'U'|}{|JU|}} &= \frac{|EJ'|}{|EJ|} \\ \times \frac{|J'U'|}{|JU|} &= \frac{|EU|}{|EU'|} \\ \sqrt{\frac{|JU|}{|J'U'|}} &= \frac{|EU|}{|EU'|} \end{aligned}$$

4)

Only one statement is true for each drawing. Which one?

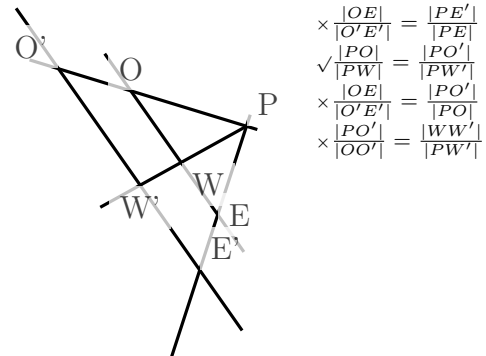
Quick:
3140

a)



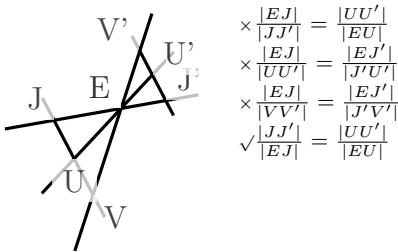
$$\begin{aligned} \times \frac{|GO|}{|G'O'|} &= \frac{|XO'|}{|XO|} \\ \sqrt{\frac{|QQ'|}{|GG'|}} &= \frac{|XQ'|}{|XG'|} \\ \times \frac{|XG|}{|XO|} &= \frac{|XO'|}{|XG'|} \\ \times \frac{|XO|}{|XG|} &= \frac{|XG'|}{|XO'|} \end{aligned}$$

b)



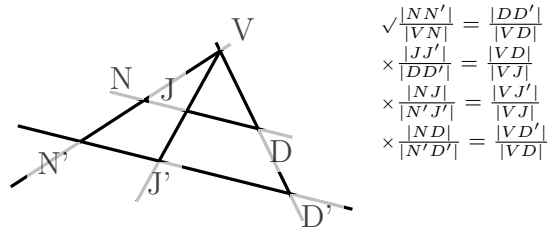
$$\begin{aligned} \times \frac{|OE|}{|O'E'|} &= \frac{|PE'|}{|PE|} \\ \sqrt{\frac{|PO|}{|PW|}} &= \frac{|PO'|}{|PW'|} \\ \times \frac{|OE|}{|O'E'|} &= \frac{|PO|}{|PO'|} \\ \times \frac{|PO|}{|OO'|} &= \frac{|WW'|}{|PW'|} \end{aligned}$$

c)



$$\begin{aligned} \times \frac{|EJ|}{|JJ'|} &= \frac{|UU'|}{|EU|} \\ \times \frac{|EJ|}{|UU'|} &= \frac{|EJ'|}{|J'U'|} \\ \times \frac{|EJ|}{|VV'|} &= \frac{|EJ'|}{|J'V'|} \\ \sqrt{\frac{|JJ'|}{|EJ|}} &= \frac{|UU'|}{|EU|} \end{aligned}$$

d)



$$\begin{aligned} \sqrt{\frac{|NN'|}{|VN|}} &= \frac{|DD'|}{|VD|} \\ \times \frac{|JJ'|}{|DD'|} &= \frac{|VD|}{|VJ|} \\ \times \frac{|NJ|}{|N'J'|} &= \frac{|VJ'|}{|VJ|} \\ \times \frac{|ND|}{|N'D'|} &= \frac{|VD'|}{|VD|} \end{aligned}$$

Good Luck!