

# Worksheet

09/16/2020

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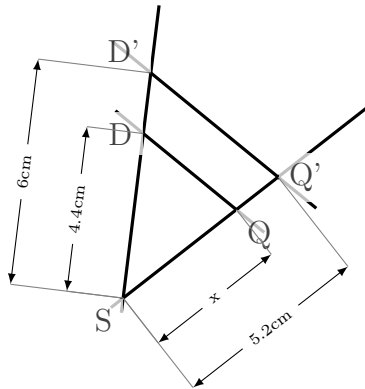
Problem quickname: 8979

1)

Specify the length of the line segment marked "x". Apply the intercept theorems.

Quick:  
8979

a)



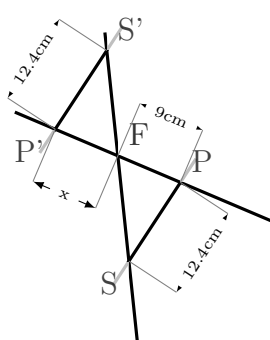
$$1. \frac{|SQ|}{|SQ'|} = \frac{|SD|}{|SD'|}$$

$$1a. \frac{x}{5.2} = \frac{4.4}{6}$$

$$2. x = \frac{4.4 \cdot 5.2}{6}$$

$$3. x = 3.8$$

b)



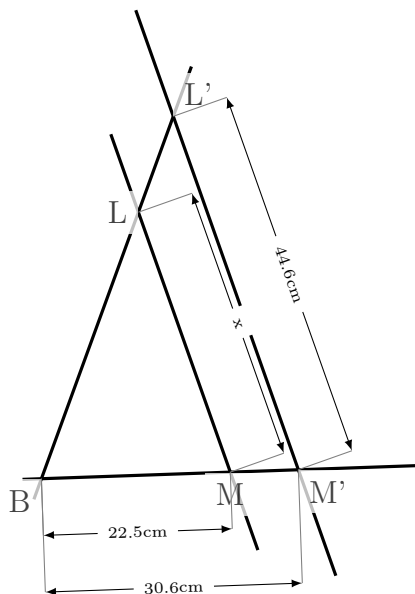
$$1. \frac{|S'P'|}{|SP'|} = \frac{|FP'|}{|FP|}$$

$$1a. \frac{12.4}{12.4} = \frac{x}{9}$$

$$2. x = \frac{12.4 \cdot 9}{12.4}$$

$$3. x = 9$$

c)



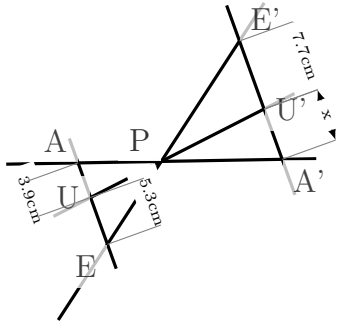
$$1. \frac{|M'L'|}{|ML'|} = \frac{|BM'|}{|BM|}$$

$$1a. \frac{44.6}{x} = \frac{30.6}{22.5}$$

$$2. x = \frac{22.5 \cdot 44.6}{30.6}$$

$$3. x = 32.8$$

d)



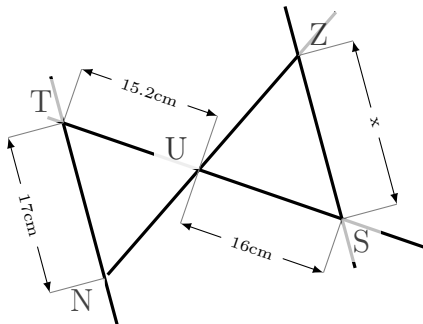
1.  $\frac{|EU|}{|AU|} = \frac{|E'U'|}{|A'U'|}$
- 1a.  $\frac{5.3}{3.9} = \frac{7.7}{x}$
2.  $x = \frac{3.9 \cdot 7.7}{5.3}$
3.  $x = 5.7$

2)

Specify the length of the line segment marked "x". Apply the intercept theorems.

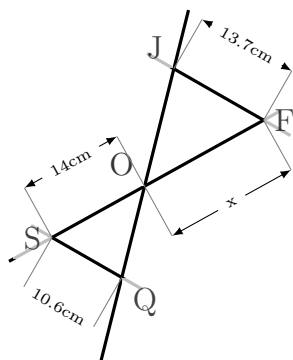
Quick:  
8979

a)



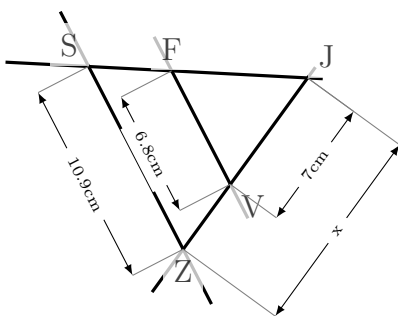
1.  $\frac{|TN|}{|SZ|} = \frac{|UT|}{|US|}$
- 1a.  $\frac{17}{x} = \frac{15.2}{16}$
2.  $x = \frac{16 \cdot 17}{15.2}$
3.  $x = 17.9$

b)

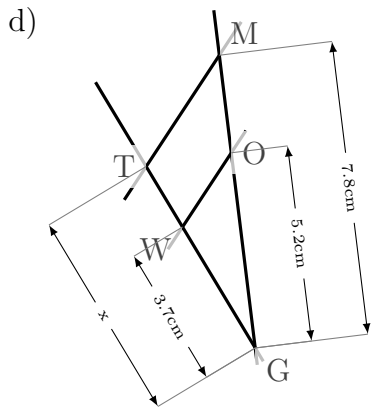


1.  $\frac{|FJ|}{|SQ|} = \frac{|OF|}{|OS|}$
- 1a.  $\frac{13.7}{10.6} = \frac{x}{14}$
2.  $x = \frac{13.7 \cdot 14}{10.6}$
3.  $x = 18$

c)



1.  $\frac{|SZ|}{|FV|} = \frac{|JZ|}{|JV|}$
- 1a.  $\frac{10.9}{6.8} = \frac{x}{7}$
2.  $x = \frac{10.9 \cdot 7}{6.8}$
3.  $x = 11.2$

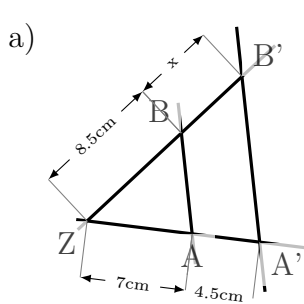


1.  $\frac{|GW|}{|GO|} = \frac{|GT|}{|GM|}$
- 1a.  $\frac{3.7}{5.2} = \frac{x}{7.8}$
2.  $x = \frac{3.7 \cdot 7.8}{5.2}$
3.  $x = 5.6$

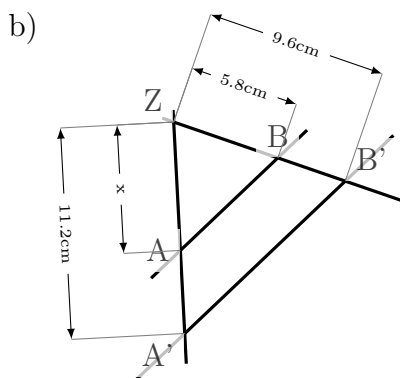
3)

Specify the length of the line segment marked "x". Apply the intercept theorems.

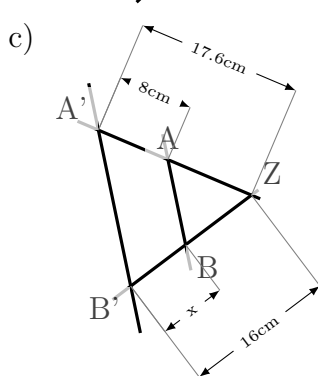
Quick:  
8979



1.  $\frac{|BB'|}{|AA'|} = \frac{|ZB|}{|ZA|}$
- 1a.  $\frac{x}{4.5} = \frac{8.5}{7}$
2.  $x = \frac{8.5 \cdot 4.5}{7}$
3.  $x = 5.5$

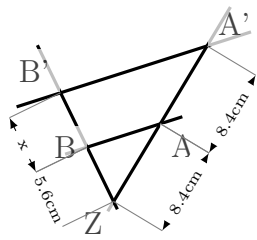


1.  $\frac{|ZA'|}{|ZA|} = \frac{|ZB'|}{|ZB|}$
- 1a.  $\frac{11.2}{x} = \frac{9.6}{5.8}$
2.  $x = \frac{5.8 \cdot 11.2}{9.6}$
3.  $x = 6.8$



1.  $\frac{|ZA'|}{|AA'|} = \frac{|ZB'|}{|BB'|}$
- 1a.  $\frac{17.6}{8} = \frac{16}{x}$
2.  $x = \frac{8 \cdot 16}{17.6}$
3.  $x = 7.3$

d)



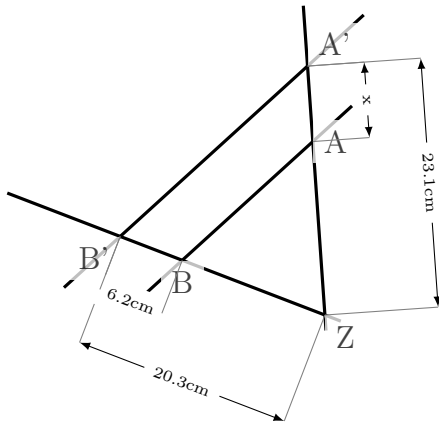
1.  $\frac{|ZA|}{|AA'|} = \frac{|ZB|}{|BB'|}$
- 1a.  $\frac{5.6}{8.4} = \frac{x}{8.4}$
2.  $x = \frac{5.6 \cdot 8.4}{8.4}$
3.  $x = 5.6$

4)

Specify the length of the line segment marked "x". Apply the intercept theorems.

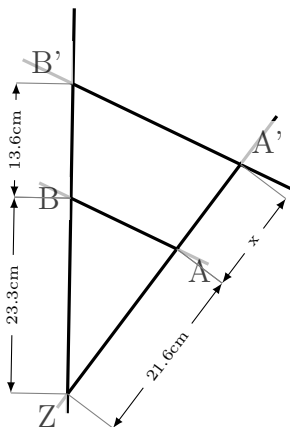
Quick:  
8979

a)

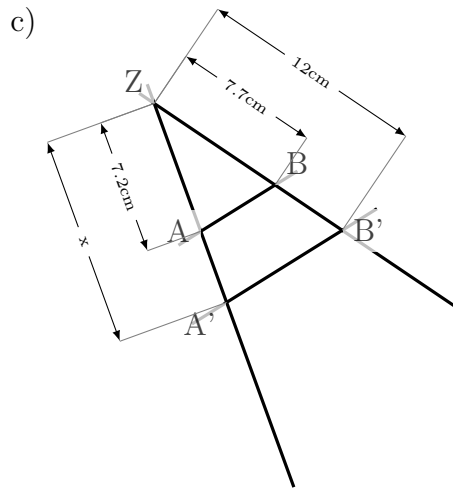


1.  $\frac{|ZA'|}{|AA'|} = \frac{|ZB'|}{|BB'|}$
- 1a.  $\frac{x}{23.1} = \frac{20.3}{6.2}$
2.  $x = \frac{20.3 \cdot 23.1}{6.2}$
3.  $x = 7$

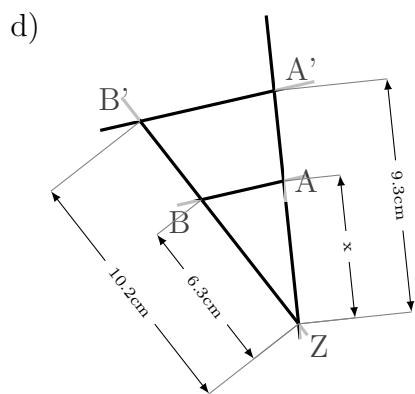
b)



1.  $\frac{|BB'|}{|AA'|} = \frac{|ZB|}{|ZA|}$
- 1a.  $\frac{13.6}{x} = \frac{23.3}{21.6}$
2.  $x = \frac{21.6 \cdot 13.6}{23.3}$
3.  $x = 12.6$



1.  $\frac{|ZA'|}{|ZA|} = \frac{|ZB'|}{|ZB|}$
- 1a.  $\frac{x}{7.2} = \frac{7.7}{12}$
2.  $x = \frac{12 \cdot 7.7}{7.2}$
3.  $x = 11.2$



1.  $\frac{|ZB|}{|ZA|} = \frac{|ZB'|}{|ZA'|}$
- 1a.  $\frac{6.3}{x} = \frac{10.2}{9.3}$
2.  $x = \frac{9.3 \cdot 6.3}{10.2}$
3.  $x = 5.7$

Good Luck!