

pg 276-279 ~~30, 31, 32, 33~~ #'s 1-22, 25-27

1) 30

2) 6.25

3) $\frac{EC}{AC} = \frac{1}{1}$ & $\frac{ED}{DB} = \frac{1}{1}$

Since these ratios are equal, $\overline{AB} \parallel \overline{CD}$ by the converse of the Δ Proportionality Thm.

4) $\frac{WU}{US} = \frac{67.5}{54} = \frac{5}{4}$ & $\frac{VT}{TR} = \frac{90}{72} = \frac{5}{4}$

Since these ratios are equal, ~~the lines are parallel~~
 $\overline{TV} \parallel \overline{RS}$ by the converse of the Δ Prop. Thm.

5) 286 ft

6) $QR = 9$, $RS = 12$

7) $CD = 4$, $AD = 6$

8) $5\frac{1}{3}$

9) 20

10) $\frac{EC}{CA} = \frac{12}{4} = \frac{3}{1}$ & $\frac{ED}{DB} = \frac{14}{4\frac{2}{3}} = \frac{3}{1}$

Thus $\overline{AB} \parallel \overline{CD}$ by the conv of Prop. Thm

11) $\frac{PM}{MO} = \frac{6.3}{2.7} = \frac{7}{3}$ & $\frac{PN}{NR} = \frac{7}{3}$. Since these ratios are equal $\overline{MN} \parallel \overline{QR}$ by (conv. of Prop. Thm)

$$12) LM = 2.83 \text{ ft}, MN = 2.39 \text{ ft}$$

$$13) BC = 6, CD = 5$$

$$14) ST = 10, TV = 6$$

$$15) CE$$

$$16) AD$$

$$17) BD$$

$$18) AG$$

$$19) DF$$

$$20) CG$$

$$21) 15 \text{ in. or } 26\frac{2}{3} \text{ in.}$$

$$22a) \frac{AC}{BD} = \frac{CE}{DF}$$

$$b) 71.4 \text{ cm}$$

$$c) 255 \text{ cm}$$

$$25a) PR = 6, RT = 8, QS = 3, SU = 4$$

$$b) \frac{PR}{RT} = \frac{QS}{SU} \quad \text{or} \quad \frac{6}{8} = \frac{3}{4}$$

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$$26) 13\frac{1}{3}$$

$$27) 15$$