

## 4-39. See below.

a. $t=11.524$
b. $p \approx 3.215$
c. $b \approx 148.505$

## 4-40. See below.

a. $x^{2}+18^{2}=30^{2}, x=24$
b. $2 x+20^{\circ}+3 x+20^{\circ}+x+2 x=360^{\circ}, x=40^{\circ}$
c. $\frac{5}{12}=\frac{3}{x} ; \quad \frac{36}{5}=7.2$

4-41. They are congruent. Possible response: Reflect $\triangle A D S$ across a vertical line, then translate it.
4-42. 24 possible ways: $\mathrm{ABCD}, \mathrm{ABDC}, \mathrm{ACBD}, \mathrm{ACDB}, \mathrm{ADBC}, ~ \mathrm{ADCB}, \mathrm{BACD}, \mathrm{BADC}, \mathrm{BCAD}$, BCDA, BDAC, BDCA, CABD, CADB, CBAD, CBDA, CDAB, CDBA, DABC, DACB, DBAC, DBCA, DCAB, DCBA

4-43. Her father's eyes were $\approx 69.126$ inches high.

## 4-44. See below.

a. $A=144 \mathrm{~cm}^{2}, P=52 \mathrm{~cm}$
b. $A=696.67 \mathrm{~m}^{2}, P=114.67 \mathrm{~m}$
c. $A=72 \mathrm{sq} \mathrm{cm}, P=48 \mathrm{~cm}$
d. $A=130$ sq. feet, $P=58$ feet

