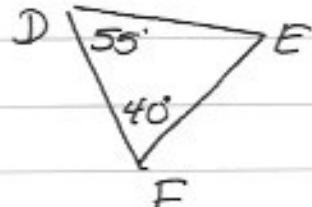
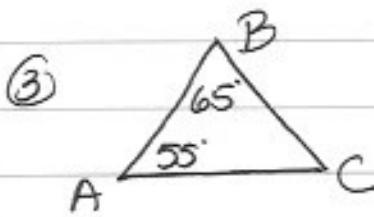
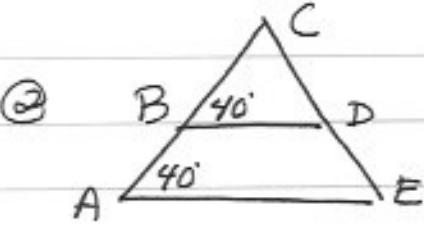
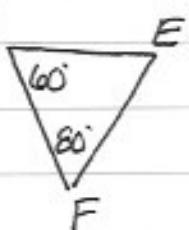
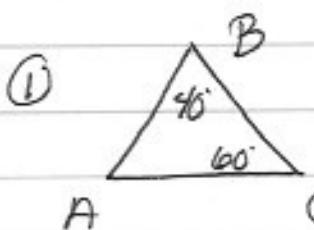


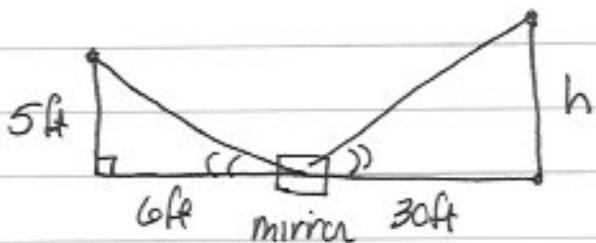
## Similar Δ's & Indirect Measurement

Are the Δ's ~? if so, then write the ~ statement



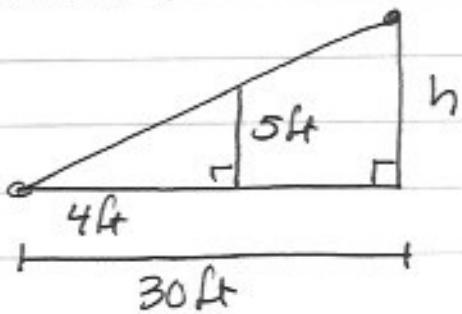
Applications. Write an equation. Solve.

- ④ you are 5 ft tall & standing 6 ft from a mirror. a tree is 30 ft from the same mirror. how tall is the tree?



(next page)

⑤ you are 5ft tall & cast a 4ft long shadow. A tree casts a 30ft shadow. how tall is the tree?



Answers:

① yes by AA~.  $\triangle ABC \sim \triangle FED$

② yes by AA~.  $\triangle ACE \sim \triangle BCD$

③ no

$$\textcircled{4} \quad \frac{5}{h} = \frac{4}{30} \quad h = 25 \text{ ft}$$

$$\textcircled{5} \quad \frac{4}{30} = \frac{5}{h} \quad h = 37.5 \text{ ft}$$