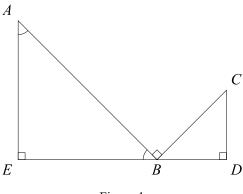
Handout 3: Oh, Yeah? Prove It



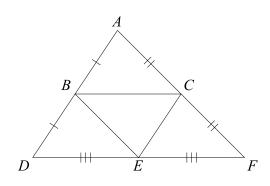


Figure 1

Figure 2

Use Figure 1 to prove that $\triangle ABE \sim \triangle CBD$ in questions 1-5.

- 1. What allows us to say that $\angle AEB = \angle CDB = \angle ABC = 90^{\circ}$?
- 2. What's the sum of the measures of $\angle ABE$ and $\angle EAB$?
- 3. Fill in the blanks: ____ = ___ = 45° .
- 4. Find the measure of $\angle CBD$ and $\angle BCD$.
- 5. Prove that $\triangle ABE \sim \triangle CBD$.

Use Figure 2 to prove that $\Delta DAF \sim \Delta BEC$ in questions 6 – 10.

- 6. What allows us to say that *B* is the midpoint of \overline{AD} ?
- 7. Find the ratio BC:DF.
- 8. Find the ratio BE : AF.
- 9. Find the ratio CE : AD.
- 10. Prove that $\Delta DAF \sim \Delta BEC$.

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