

3)

Statements	Reasons
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1) $\angle W \cong \angle Y$
2) $\angle V \cong \angle X$

① Opp. angles of a parallelogram are congruent.

3) $\angle W \cong \angle Y$

② Substitution

4) $52 + 60 + \angle YVX = 180^\circ$

③ Interior angle sum of a $\triangle = 180^\circ$.

5) $\angle YVX = 68^\circ$

④ Subtraction

6) $YV \parallel XW$

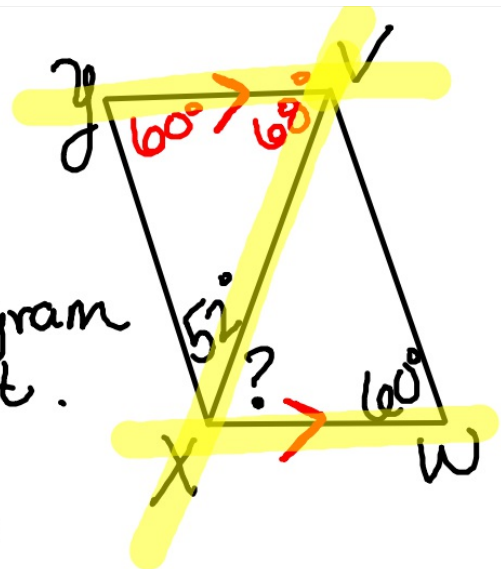
⑤ Opp. sides of a parallelogram are parallel.

7) $\angle YVX \cong \angle VXW$

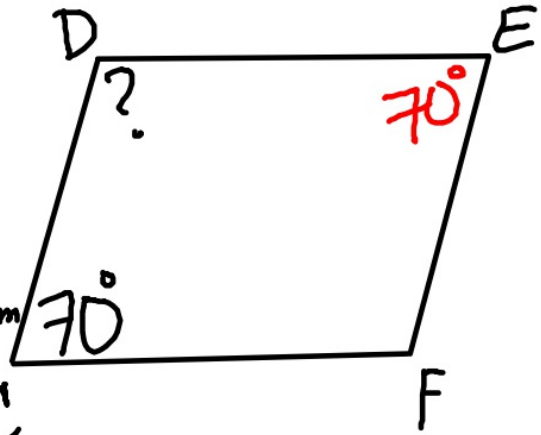
⑥ Alternate Interior angles are congruent.

8) $68^\circ \cong \angle VXW$

⑦ Substitution



2)



Statements / Reasons

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|---|--|
| $\angle C \cong \angle E$ | ① Opp. angles |
| $\angle D \cong \angle F$ | of a parallelogram |
| $70^\circ = \angle E$ | are congruent. |
| $\angle D + \angle E$ | ② Substitution |
| $+ \angle C + \angle F = 360$ | ③ Interior angle sum of a quadrilateral is 360° |
| $\angle D + 70$ | ④ Substitution |
| $+ 70 + \angle D = 360$ | |
| ⑤ $140 + 2(\angle D) = 360$ | ⑤ CLT |
| $\quad -140 \quad \quad -140$ | |
| ⑥ $2(\angle D) = 220$ | ⑥ Subtraction |
| $\quad \quad \quad \underline{\quad} \quad \quad \underline{\quad}$ | |
| ⑦ $\angle D = 110$ | ⑦ Division |

③

Statements	Reasons
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1) $XY \parallel VW$ $XW \parallel YV$	Opp. sides of a parallelogram are parallel
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2) $\angle YXV \cong \angle WVX$	② Alternate Interior angles are congruent.
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3) $52^\circ = \angle WXV$	③ Substitution
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4) $\angle XVW + \angle VXW + \angle W = 180^\circ$	④ Interior sum of a triangle = 180°
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5) $52 + \angle VXW + 60 = 180$	⑤ Substitution
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6) $\angle VXW = 68^\circ$	⑥ Subtraction
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