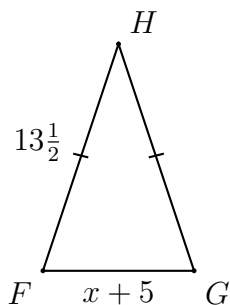


Name:

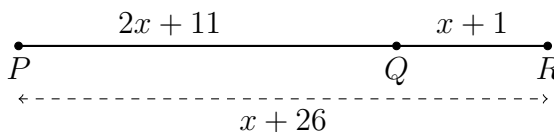
### 1.5 Homework: Segments, equilateral and isosceles triangles, perimeter

1. The perimeter of the isosceles  $\triangle FGH$  is 35 with  $\overline{FH} \cong \overline{GH}$ . If  $FG = x + 5$  and  $FH = 13\frac{1}{2}$ , find  $x$ .

Show your work with an equation for full credit.



2. Given  $\overline{PQR}$ ,  $PQ = 2x + 11$ ,  $QR = x + 1$ ,  $PR = x + 26$ . Find  $x$ .



(a) Write down an equation to represent the situation.

(b) Solve for  $x$ .

(c) Check your answer.

3. Given  $\overline{DEF}$ ,  $DE = 3\frac{1}{3}$ , and  $EF = 1$ . Find  $DF$ .

