- **4.** It looks as if P might be equidistant from F and X. Is it?
- 5. Suppose Pat spoke of a line *l* joining *F* and *T* while you thought of a line *n* joining *F* and *T*. Is it better to say that *l* and *n* are two different lines, or to say that we have one line with two different names?
- **6.** Point X is equidistant from F and T. Furthermore, point Y is equidistant from F and T. Does that mean that X and Y are equally distant from F?
- 7. Suppose you were asked to find a point 5 cm from P, 5 cm from F, and 5 cm from T. Is there such a point?
- 8. Do you believe there is any point that is equidistant from P, F, and T?

## **Written Exercises**

1. Copy and complete the table. Refer to the diagrams on pages 1 and 2.

Distance between	Diagram distance	Ground distance
X and $P$	_5 cm	_10_ m
X and $F$		<u>?</u> m
X and $T$	<u>?</u> cm	_?m
Y and $F$	<u>?</u> cm	<u>19</u> m
F and T	12 cm	? m

For Exercises 2-4 use a centimeter ruler. If you don't have a centimeter ruler, you may use the centimeter ruler shown below as a guide. Either open your compass to the appropriate distance or mark the appropriate distance on the edge of a sheet of paper.



- 2. Copy the points F, T, and P from the diagram on page 2. If you lay your paper over the page, you can see through the paper well enough to get the points.
  - **a.** Draw a line to indicate all points equidistant from F and T.
  - **b.** Draw a circle to indicate points 6 cm from *P*. If you don't have a compass, draw as well as you can freehand.
  - c. How many points are equidistant from F and T, and are also 6 cm from P?
- 3. Repeat Exercise 2, but use 2 cm instead of 6 cm.
- **4.** There is a distance you could use in parts (b) and (c) of Exercise 2 that would lead to the answer *one point* in part (c). Estimate that distance.