# Line Graphs TEKS 8.12.C

You can use a **line graph** to show how numerical data change over time.

EXAMPLE

Use the line graph, which shows Charlie's weight from birth to 5 years old. (a) How much weight did Charlie gain in 5 years? (b) At what age did Charlie weigh 30 pounds? (c) In which year did Charlie gain the most weight?

Charlie's Weight

a. The lowest point on the graph shows that Charlie weighed 10 pounds at birth. The highest point on the graph shows he weighed 42.5 pounds at age 5.

$42.5 - 10 = 32.5$

▶ Charlie gained 32.5 pounds in 5 years.

b. The point on the graph to the right of 30 on the weight axis corresponds to an age of 2.

▶ Charlie weighed 30 pounds at age 2.

c. The graph is steepest from birth to age 1.

▶ Charlie gained the most weight in his first year.
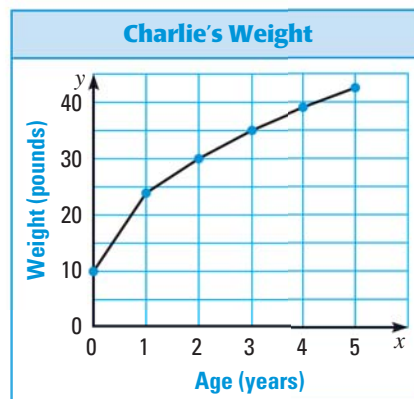
PRACTICE

In Exercises 1–5, use the line graph above.

1. How much did Charlie weigh on his first birthday?

2. How old was Charlie when he weighed 40 pounds?

3. In which year did Charlie gain the least weight?

4. How much weight did Charlie gain his first year?

5. How much weight did Charlie gain from age 1 to age 4?

In Exercises 6–14, use the line graph, which shows Abby's height from birth to 4 years old.

Abby's Height

6. How tall was Abby when she was born?

7. How old was Abby when she was 35 inches tall?

8. In which year did Abby grow the most?

9. In which year did Abby grow the least?

10. How many inches did Abby grow from age 3 to age 4?

11. In which year did Abby grow 5 inches?

12. How many inches did Abby grow in 4 years?

13. At what age was Abby's height double her height at birth?

14. If Abby maintains the same growth rate from age 4 to age 5 that she had from age 3 to age 4, how tall will she be when she is 5?