$\qquad$ Period: $\qquad$ Score: $\qquad$ 1 $\qquad$

## HW 3-7: Qualitative Graphs

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Match the situation with an appropriate graph. (1-5)

1. A man takes a ride on a ferris wheel



2. A woman climbs a hill at a steady pace and then starts to run down one side.




3. A child swings on a swing.




4. A child climbs up a slide and then slides down.





Draw a graph for each situation.
5. Your distance from the ground as you jump rope.

7. Your pulse rate as you watch a scary movie.

6. Your energy level during one gym class.

8. Your speed as you skateboard down a hill.


Time

Describe the situation that happens in each graph.
9. The graph shows the weight of a baby and the weight of a puppy for their first two years. Decide which graph belongs to a puppy and which belongs to a baby.

10. In words, describe a student's inline skating experience shown in the graph.

a) Make a table to organize the information from the problem.
b) Write an equation for the situation.
c) Interpret the slope.
d) Interpret the $y$-intercept.
11. Carmen pays a snowboard instructor for private lessons. The instructor charges an initial fee and a constant amount per hour. Carmen paid $\$ 265$ for six hours of instruction. Then for eight hours of instruction she paid $\$ 345$.
12. Charlotte planted her tomato plant in her apartment. After 2 weeks, the tomato plant was 14 inches tall. After 5 weeks, the tomato plant was 23 inches tall. Assume the relationship is linear.
13. Thomas is writing a novel. After 4 weeks, he has written 85 pages. After 7 weeks, he has written 133 pages. Assume the relationship is linear.
14. Kelly bought a new 3D Television set. The value of the TV set after 3 years was $\$ 850$, and after 6 years the TV set was worth $\$ 100$. Assume the relationship is linear.
15. Zane hired a landscaper to work in his yard. The landscaper charges a consultation fee and an hourly rate for work done. After 5 hours of work, Zane owed the landscaper $\$ 230$. After 9 hours of work he owed $\$ 374$. Assume the relationship is linear.
16. The second little pig is building a house out of wood. He started with a pile of $2 \times 4$ boards. After one week of building, there were 459 boards left. There were 207 boards left in the pile after 11 days. Assume the relationship is linear.

